COMMONWEALTH OF MASSACHUSETTS

DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

Proceeding by the Department of Telecommunications and Energy on Its Own Motion to Implement the Requirements of the Federal Communications Commission's Triennial Review Order Regarding Switching for Mass Market Customers	D.T.E. 03-60

**PANEL TESTIMONY ON BULK HOT CUTS
AND ASSOCIATED NON-RECURRING
COSTS ON BEHALF OF**

**AT&T COMMUNICATIONS OF NEW ENGLAND, INC.
AND BROADVIEW NETWORKS**

PANEL MEMBERS

**Michael Hou
Brenda Kahn
Richard Walsh**

PUBLIC VERSION

February 6, 2004 (Revised 2/18/04 Highlighted p. 65)

Table of Contents

I. WITNESS BACKGROUND

Q. MS. KAHN, PLEASE STATE YOUR NAME, TITLE AND BUSINESS ADDRESS.

A. My name is Brenda Kahn. I am employed by AT&T as a District Manager,

Cost/Technical Analysis & Advocacy Division, Local Services and Access Management.

My business address is 1 AT&T Way, Bedminster, New Jersey.

Q. PLEASE DESCRIBE YOUR EDUCATIONAL AND PROFESSIONAL BACKGROUND.

A. I have two Economics degrees, a Bachelor of Arts in 1969 from Queens College and a

Ph.D. in 1978 from Columbia University. I have published an article in the Journal of

Regulatory Economics entitled " The Effects of Regulation and Competition on the Price

of AT&T Intrastate Telephone Service." I have also published an article entitled "The

Impact of IntraLATA Competition on Local Exchange Company Prices" in a book

entitled "Economic Innovations in Public Utility Regulation." I am also a member of the

steering committee for the Rutgers University Advanced Workshop in Regulation and

Public Utility Economics and have been a regular presenter and discussant at academic

regulatory conferences.

Q. PLEASE DESCRIBE YOUR CURRENT RESPONSIBILITIES AS WELL AS YOUR EXPERIENCE IN THE TELECOMMUNICATIONS INDUSTRY.

A. I have been employed by AT&T since 1978 to the present time. From August 1978 to

June 1982, I was employed by AT&T as a Staff Manager in the WATS Rate Planning

Group responsible for the development, implementation and support of quantitative

studies used to support interstate and intrastate tariff filings. I joined the Strategic Pricing

and Decision Support Group in the Marketing Department of AT&T in November 1982,

and was responsible for developing and supporting demand analysis models for AT&T

1		Switched Network services. In October 1983, I joined the Marketing Plans
2		Implementation Group where I had revenue and demand forecasting responsibilities for
3		existing and new services. In May 1989, I joined State Government Affairs and was
4		responsible for access charge and regulatory reform analysis of the intrastate
5		telecommunications markets in New York and New England states. In January 1993, I
6		joined Access Management and was responsible for interstate and intrastate access
7		charge management with particular emphasis on local exchange companies in the
8		Northeast Region. In January 1996 I was promoted to District Manager in the Local
9		Services Division where I was responsible for supervising a group that analyzed the costs
10		of local exchange service. The group has expertise in the HAI Model (including former
11		versions of the Hatfield Model), the Benchmark Cost Proxy Model and other local
12		exchange cost models and methods that have been developed. In September 1998, I
13		joined the Local Services and Access Management organization and led the local
14		connectivity cost/price team responsible for reducing local connectivity expense. I also
15		led the local infrastructure optimization team that reduced expenses associated with
16		collocation and interconnection facilities.
17	**Q.**	**HAVE YOU APPEARED BEFORE STATE REGULATORY AGENCIES?**
18	A.	Yes. I have appeared on rate, cost and access charge matters in Louisiana, Maine,
19		Maryland, Massachusetts, Mississippi, Nevada, New York, Tennessee, Vermont and
20		Missouri proceedings.
21	**Q.**	**MR. WALSH, PLEASE STATE YOUR NAME, TITLE AND BUSINESS**
22		**ADDRESS.**
23	A.	My name is Richard J. Walsh and my business address is 3577 Conroy Road, Orlando
24		Florida, 32839. I am presently providing consulting services to AT&T as a Technical

1   Analyst in the Local Services and Access Management ("LSAM") / Local Connectivity

2   Cost, Price, and Planning Division.

3   **Q.   PLEASE DESCRIBE YOUR CURRENT RESPONSIBILITIES AS WELL AS**
4   **YOUR EXPERIENCE IN THE TELECOMMUNICATIONS INDUSTRY.**

5   A.   I've been hired by AT&T to provide assistance in understanding the various options

6   available as part of the examination of the process, and related costs of performing loop

7   migrations on a bulk basis.

8   My experience in the telecommunications industry and more specifically with service

9   provisioning spans the past thirty years, where I have held various non-management and

10   management positions with New England Telephone, NYNEX, and Bellcore. This

11   includes time spent since 1997 as a consultant to major telecommunications firms in the

12   areas of business process engineering, project management, workflow analysis, and non-

13   recurring costs.

14   **Q.   MR. HOU, PLEASE STATE YOUR NAME, TITLE AND BUSINESS ADDRESS.**

15   A.   My name is Michael Hou and my title is Senior Vice President at Broadview Networks.

16   My business address is 744 Broad Street, 10th floor, Newark, NJ 07102.

17   **Q.   PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND, CURRENT**
18   **RESPONSIBILITIES AND YOUR EXPERIENCE IN THE**
19   **TELECOMMUNICATIONS INDUSTRY.**

20   A.   I have a Bachelor of Science and a Master of Science degree in Electrical Engineering

21   and Computer Science, both with Honors from M.I.T. My current responsibilities

22   include managing Broadview Networks' Wholesale Services business which includes

23   providing network, provisioning and other system capabilities for other carriers,

24   including managing the hot cut process for AT&T. I have over 15 years of experience in

25   the telecommunications business and have held a variety of positions in carrier sales,

1	product management, finance, regulatory, systems development, operations, and network
2	planning. I have been involved in a variety of NY PSC regulatory proceedings including
3	participating in the TSR Collaborative, UNE-P Collaborative, Interconnection Agreement
4	arbitrations, 271 Hearings, and most recently, the Technical Sessions regarding Bulk Hot
5	Cut processes. I have been involved in the definition and design of the operational
6	processes and systems that manage Broadview's hot cut processes with Verizon.

7 **II.**   **OVERVIEW OF TESTIMONY**

8 **Q.**   **WHAT IS THE SUBJECT MATTER OF YOUR TESTIMONY?**

9 A.   Our testimony examines both (1) the processes for and (2) the costs of performing hot

10   cuts in Massachusetts. First, we analyze the two types of volume hot cut processes that

11   Verizon has described in testimony submitted in this proceeding: its current "Project"

12   (also known as "Large Job") process and its proposed "Batch" process. Second, we

13   analyze the cost studies that Verizon has offered to support the rates to charge

14   competitive local exchange carriers ("CLECs") for performing hot cuts.

15 **Q.**   **HOW IS YOUR TESTIMONY ORGANIZED?**

16   The bulk of our testimony falls into two main sections. We first discuss hot cut processes

17   and then discuss hot cut costs.

18   In the process section, we first discuss Verizon's current Project hot cut process

19   for migrations to UNE-L from UNE-P (or from total service resale). We describe the

20   system and operational shortcomings of this process, and recommend to the Department

21   enhancements that Verizon, in collaboration with AT&T and other CLECs, should be

22   required to make to the process in order to establish an improved volume hot cut process

23   for UNE-P to UNE-L migrations that can be implemented using current technology.

1   Next, we describe and explain the substantial operational flaws inherent in

2   Verizon's proposed Batch hot cut process and refute Verizon's claims that the Batch

3   process will satisfy the FCC Triennial Review Order's ("TRO") hot cut operational

4   requirements.

5   In the cost section of our testimony, we demonstrate that Verizon's hot cut cost

6   studies for its processes produce egregiously high and improperly calculated costs that, if

7   adopted, will act as an insurmountable barrier to facilities-based competition. Verizon's

8   cost studies do not comport with efficient, forward-looking total element long run

9   incremental cost ("TELRIC") principles and, therefore, should be rejected. The

10 Department should instead adopt AT&T and Broadview's Hot Cut Cost Study to

11 determine the rates in this proceeding.

12 **III.   HOT CUT PROCESSES**

13 **Q.   WHAT PRINCIPLES SHOULD GOVERN THE DEPARTMENT'S**
14 **EVALUATION OF VERIZON'S "PROJECT" AND "BATCH" HOT CUT**
15 **PROCESSES?**

16 A.   The FCC found that CLECs competing in the mass market would be impaired without

17 access to switching as an unbundled network element ("UNE"). It based that finding on a

18 variety of factors, among which was the FCC's determination that existing hot cut

19 processes created substantial operational and economic impairment to the ability of

20 CLECs to offer services in the mass market. From the evidentiary record compiled in the

21 TRO proceeding, the FCC concluded that hot cuts "frequently lead to provisioning delays

22 and service outages" and that they "are often priced at rates that prohibit facilities-based

23 competition for the mass market."[1]

---

[1]   TRO, ¶ 465.

1   The TRO directs state commissions to approve and implement hot cut processes

2   that address both these problems. In the TRO, the FCC directs state commissions, as part

3   of their review functions under the TRO, to develop a batch hot cut process that is both

4   "seamless" and "low-cost."[2] This process must be able not only to satisfy current levels

5   of demand for hot cuts but also be designed, insofar as possible, to accommodate demand

6   for loops in a fully competitive market where the combination of UNEs known as UNE-P

7   (switching plus loops) is no longer available.[3] This is of great concern to the FCC

8   because, as it has noted, ILECs appear unable "to handle the necessary volume of

9   migrations to support competitive switching in the absence of unbundled switching."[4]

10 **Q.**   **DO YOU BELIEVE THAT EITHER VERIZON'S PROPOSED BATCH**
11   **PROCESS OR ITS LARGE JOB PROCESS, IF ENHANCED IN ACCORDANCE**
12   **WITH YOUR RECOMMENDATIONS, WILL BE ADEQUATE TO MEET THE**
13   **STANDARDS REQUIRED TO HANDLE MASS MARKET VOLUMES AS**
14   **CONTEMPLATED IN THE TRO?**

15 A.   No. First, as indicated above, we believe that Verizon's proposed Batch process is so far

16   from being adequate to the TRO's requirements as to be a non-starter.

17   Second, in spite of efficiencies that can be gained by improvements to Verizon's

18   existing Project hot cut process, that process will remain manual, and we do not believe

19   that even the most efficiently designed and implemented manual bulk hot cut process can

20   accommodate the mass-market demand volumes contemplated under the TRO standards.

21   Some improvements in scale and scope can certainly be achieved, but nothing in the

22   work presented by Verizon to date and nothing in our own experience even remotely

23   suggests that a manual process geared to current demand can be scaled to meet fully

24   competitive mass-market volumes.

---

[2]   TRO, ¶ 423.
[3]   TRO, ¶ 459.

1   To the contrary, we believe that changes in demand levels of the magnitude that

2   we forecast would require fundamentally different approaches to the loop migration

3   process, namely, some form of electronic, not manual, loop provisioning. If the

4   Department determines, at the end of its review of hot cut processes, that an optimized

5   version of the current hot cut process cannot be scaled from current demand to handle an

6   exponentially higher level of demand, then, as the FCC expressly permitted,[5] it will be

7   time to examine the issue of electronic loop provisioning ("ELP").

8 **Q.**   **IF YOU BELIEVE THAT YOUR RECOMMENDED ENHANCEMENTS TO THE**
9   **CURRENT LARGE JOB PROCESS WILL NOT CREATE A PROCESS**
10   **ADEQUATE TO MEET THE TRO'S REQUIREMENTS FOR A SEAMLESS,**
11   **LOW-COST BATCH HOT CUT PROCESS, WHY HAVE YOU**
12   **RECOMMENDED THESE ENHANCEMENTS?**

13 **A.**   We, and other CLECs have operational UNE-L businesses, and a genuinely efficient,

14   low-cost hot cut process is essential if we are to continue to operate our current

15   enterprises at current volumes.

16   **A.**   **Current "Project" Hot Cut Process**

17   1.   **Overview**

18 **Q.**   **WHAT IS A "PROJECT" HOT CUT?**

19 **A.**   A Project hot cut is the process currently used by Verizon and the CLECs to migrate a

20   large quantity of lines that are located in one central office from CLEC UNE-P (or total

21   service resale) customer accounts to unbundled loops in a single night. These hot cuts are

22   performed as a project with an individual CLEC and, under Verizon's current procedures,

23   typically consist of a minimum of 30 to a maximum of 150 lines per night.[6] Because the

---

[4]   TRO, ¶ 459.
[5]   TRO, ¶ 491.
[6]   See the *Initial Panel Testimony of Verizon Massachusetts (Hot Cuts)*, November 14, 2003
("IPT"), at 29 ("limitation of 150 cut-over lines per central office per due date").

| 1 | | Bulk hot cuts are performed for a single CLEC, lines from more than one CLEC cannot |

1   Bulk hot cuts are performed for a single CLEC, lines from more than one CLEC cannot

2   be combined in a Bulk hot cut under Verizon's current processes.

3 **Q.**   **HOW DOES A PROJECT HOT CUT DIFFER FROM AN INDIVIDUAL HOT**
4   **CUT?**

5 A.   Individual hot cuts (a.k.a. non-Project hot cuts) involve one customer account per order

6   and are worked on an order-by-order basis, whereas Project hot cuts consist of many

7   orders representing many different customer accounts that are worked simultaneously on

8   the due date. Additionally, Project hot cuts are limited to migrations from UNE-P or total

9   service resale to UNE-L, while individual hot cuts are used for any migration to UNE-L.

10 **Q.**   **PLEASE EXPLAIN WHAT YOU MEAN BY "ANY MIGRATION" TO UNE-L.**

11 A.   Individual hot cuts can, and are, used for migrations from Verizon retail to UNE-L, for

12   migrations from one CLEC to another CLEC as well as from UNE-P or from total

13   services resale to UNE-L.

14 **Q.**   **HOW IS AN INDIVIDUAL HOT CUT INITIATED?**

15 A.   In an individual hot cut, the CLEC that wishes to have a customer's loop migrated over to

16   the CLEC's switch via its collocated equipment issues a Local Service Request (LSR) to

17   Verizon. This LSR will provide all of the details that Verizon needs to migrate the

18   customer's line from its existing service arrangement over to the issuing CLEC's

19   collocated equipment via the individual hot cut process.

20 **Q.**   **LET US RETURN TO THE PROJECT HOT CUT. PLEASE EXPLAIN WHAT**
21   **THE MAJOR WORK FLOWS OF A PROJECT HOT CUT ARE.**

22 A.   The Project hot cut process can be viewed as having five major work events. These five

23   events can be classified as: (i) CLEC project initiation and order submission, (ii) Verizon

24   service order creation, (iii) Verizon network element and resource (work force)

1		assignment, (iv) Verizon pre-testing and pre-wiring, and (v) Verizon and CLEC cutover
2		activities on the project's due date.
3	**Q.**	**HOW IS A PROJECT HOT CUT INITIATED?**
4	A.	The CLEC will initiate a Project hot cut by notifying Verizon's National Marketing
5		Center (NMC) of its desire to schedule a Project hot cut project. In this notification,
6		which is typically done today via a phone call, the CLEC will identify the central office
7		in which the lines reside, the number of lines involved with the project and the date that
8		the CLEC would like these conversions to take place. The requested conversion date is
9		typically 15 business days from the date that the notification is made. The CLEC will
10		request such a project only after it has obtained a sufficient number (at least 30 lines) of
11		local customers using its UNE-P service in a single central office where the CLEC has a
12		collocation arrangement and facilities. Verizon's processes strictly limit the availability
13		of Project hot cut projects to one CLEC, per night, per manager's area, combined with a
14		two project per night per geographic area limitation.[7]
15	**Q.**	**WHAT ARE THE MANAGER'S AREAS AND GEOGRAPHIC AREAS?**
16	A.	Verizon has not communicated specific information about these areas in this proceeding,
17		except to say that there are seven geographic areas, for the purposes of Verizon's
18		limitation policy, in Massachusetts.[8] A manager's area is simply "the region that
19		includes the central offices supervised by a particular Verizon manager."[9]
20		Managers' and geographic areas vary according to size and the numbers of lines
21		in service at central offices.[10] We know from evidence in other states that managers' area

---

[7] Verizon's Response to ATT-VZ-22.
[8] IPT, at 29.
[9] Verizon's Response to ATT-VZ-22.
[10] *Id.*

1		can range from a single central office (in high-density areas such as Boston) to five
2		central offices.[11]
3	**Q.**	**HOW IS THE CLEC NOTIFIED THAT ITS REQUEST FOR A PROJECT HOT**
4		**CUT PROJECT HAS BEEN ACCEPTED BY VERIZON?**
5	A.	Once Verizon's NMC receives the request, it confers with its central office frame
6		personnel to determine whether Verizon will have sufficient resources at the given
7		location as well as the necessary time to handle the proposed volume, based on central
8		office staffing and other frame work that must be performed. Based on discussions with
9		the frame personnel, the NMC informs the CLEC of Verizon's ability to support the
10		requested project due date.
11		This notification will prompt the CLEC to issue the LSRs, typically by using
12		Verizon's EDI interface, for each customer line that will be associated with the project.
13		However, before doing so, the CLEC will conduct an electronic pre-order query of
14		Verizon's "loop make-up" database to determine whether the loop is on a non-copper
15		facility such as an Integrated Digital Loop Carrier (IDLC) systems. All customers who
16		have loops on IDLC facilities will be excluded from the project,[12] as Verizon's current
17		Project hot cut process does not support the migration of these types of loops.
18		Under current procedures, within five days of the issuance of the LSRs, the CLEC
19		is required to create and provide a spreadsheet to Verizon identifying the customer and
20		facility details for each line associated with the project.

---

[11]   Verizon's Responses to ATT-VZ-11S and ATT-VZ-12 in New York PSC Docket No. 02-C-1425.
[12]   A CLEC may have a customer account with three lines, of which one is being provisioned on IDLC, and the other two on copper facilities. Because the customer's account may also involve hunting, all three lines would be excluded from the project.

| 1 | **Q.** | **WHAT IS THE PURPOSE OF THIS SPREADSHEET?** |

2   A.   The spreadsheet, which is required by Verizon's current process, is intended to document

3   all the orders and associated lines for which the CLEC has issued LSRs with respect to a

4   given project. The spreadsheet provides information such as purchase order numbers

5   (PONS), telephone numbers and, when available, the line identity number (known as the

6   TXNU). Verizon uses the spreadsheet as a "management tool" and compares it to the

7   orders that Verizon has in its system, thereby ensuring that the orders the CLEC sends to

8   Verizon match the orders that Verizon has in its system.

9   **Q.**   **YOU DESCRIBE THIS SPREADSHEET AS REQUIRED UNDER CURRENT**
10   **PROCEDURES; WHAT DO YOU MEAN?**

11 A.   In its Initial Panel Testimony, Verizon proposed to modify the spreadsheet process as a

12   result of discussions held at technical workshops in New York concerning the Large Job

13   process.[13] Verizon stated that it was willing to "replace the CLEC-generated spreadsheet

14   with a report automatically generated by WPTS [Verizon's Wholesale Provisioning

15   Tracking System] on the basis of the LSRs submitted by the CLEC." Thus, the

16   submission to Verizon of a CLEC-generated spreadsheet may be eliminated from the

17   Large Job hot cut process in the future. In this testimony, however, we assume the

18   existence of this step because it has not yet been eliminated.

19 **Q.**   **WHAT OCCURS AFTER VERIZON RECEIVES THE LSRS ASSOCIATED**
20   **WITH THE PROJECT FROM THE CLEC?**

21 A.   Like all LSRs that are sent through the electronic ordering interface, Verizon's OSS will

22   attempt to validate the CLEC's request against a series of front-end edits before passing

23   them to the legacy Service Order Processor (SOP) OSS. LSRs which fail the front-end

24   edits (because of violations in the published business rules, e.g., incorrect data within a

1   specific field) will probably be returned to the CLEC automatically. LSRs which pass

2   the front-end edits and proceed automatically to the SOP without manual intervention are

3   considered as flow-through.

4   Because the LSRs that the CLEC is issuing are for customers to whom the CLEC

5   is already providing local service using UNE-P, the CLEC already has accurate

6   customer-specific information necessary for the processing of these LSRs.   This

7   information improves the quality of the LSRs being issued in conjunction with Project

8   hot cut projects, in that way allowing the vast majority of CLEC orders to flow-through

9   Verizon's front-end interface to its legacy Operations Support Systems (OSS), which are

10   used to process the orders. The CLEC orders that flow through generate internal Verizon

11   service orders that provide Verizon's work centers with the information necessary for

12   them to perform the hot cuts on the due date.

13   **Q.   WHAT IS AT&T'S EXPERIENCE WITH THE NON-FLOW-THROUGH RATE**
14   **AT THIS POINT IN THE PROCESS?**

15   A.   The non-flow through rate is extremely low: less than one percent. Thus, more than 99

16   percent of AT&T's orders flow through to Verizon's back-end systems where the service

17   orders are created without human intervention.

18   **Q.   HOW CAN AT&T DETERMINE THAT THE FLOW-THROUGH RATE IS SO**
19   **HIGH?**

20   A.   Generally within minutes after submitting the LSRs associated with a project, AT&T

21   receives its Firm Order Confirmation (FOC), which indicates that LSRs have reached the

22   legacy OSS (SOP) and flowed-through to Verizon's back-end provisioning systems. It

23   takes a considerably longer period of time to receive a FOC on orders that do not flow

24   through. Non-flow-through orders have to be reviewed and processed by a Verizon

---

[13]   IPT, at 26-27.

1		NMC service representative, and the FOCs have to be generated manually by that service
2		representative.
3	Q.	**WHAT HAPPENS TO THE ORDERS THAT FALL OUT TO THE NMC AFTER**
4		**THE NMC REPRESENTATIVE ISSUES THE FOC?**
5	A.	If the NMC representative can figure out the problem that prevented the order from
6		flowing through, he or she will manually create the Verizon service order. Otherwise, the
7		NMC representative will contact the CLEC to help resolve the problem associated with
8		the order. It is AT&T and Broadview's experience that involving the CLEC to resolve an
9		order problem occurs less than 1% of the time. Generally, moreover, when the NMC
10		representative queries a CLEC business office representative, seeking information
11		regarding an LSR which has fallen out, this results in the CLEC's issuing a corrected (or
12		supplemental) LSR.[14]
13	Q.	**FOLLOWING THE CREATION OF THE VERIZON INTERNAL SERVICE**
14		**ORDERS, WHAT OTHER STEPS DOES VERIZON PERFORM PRIOR TO THE**
15		**CUTOVER?**
16	A.	The internal service order is important because it represents the document from which all
17		work is performed and from which the CLEC's request is fulfilled. Once its created, the
18		automatic functions preformed by the operational support systems (OSSs) use this
19		document as the vehicle to assign network elements, and the resources necessary to
20		assemble the elements into working UNEs.
21		As for the pre-cutover steps that Verizon performs, we need to distinguish
22		between the automated action of Verizon's OSS and the manual tasks that Verizon's
23		personnel must perform. Once the internal Verizon service orders are created, other than
24		the physical work required on the frame, the vast majority of the actions taken are

1   performed by automated electronic systems. Verizon, however, does use a manual,

2   labor-intensive process (a) to double-check that it is, in fact, working the orders that the

3   CLEC sent over and (b) to keep track of the status of each order in a Project.

4 **Q.   PLEASE DESCRIBE THE MANUAL, LABOR-INTENSIVE ACTIVITIES TO**
5 **WHICH YOU JUST REFERRED.**

6 A.   Some of the redundancy and manual effort associated with Verizon's current process

7   includes, but is not limited to, (i) the creation of a second internal project spreadsheet (the

8   first spreadsheet under Verizon's current procedures is generated by the CLEC) in

9   Verizon's Wholesale Tracking Provisioning System ("WPTS"),[15] which Verizon sends

10   downstream to the various Verizon work groups; (ii) the manual matching of the orders

11   in the NMC against the spreadsheets; (iii) the RCCC analysis of the order request activity

12   to ensure all orders are included in the project and existing Verizon facilities are being

13   reused; (iv) the verification of lines that may be on non-copper facilities due to

14   discrepancies in Verizon's loop make-up database; (v) the manual updates necessary to

15   WPTS; and (vi) the verbal communications that occur between Verizon's work centers

16   and between Verizon and the CLECs.

17 **Q.   YOU ALSO INDICATED EARLIER THAT PHYSICAL WORK ON THE**
18 **CENTRAL OFFICE FRAME IS REQUIRED. WHAT DOES THIS PHYSICAL**
19 **WORK ENTAIL?**

20 A.   The physical work required at the central office entails the CO Frame Technician's

21   connecting the Verizon loop to the CLEC's switch. Since the Verizon loop is already

22   connected to the Verizon switch (via the Port element) the CO Frame Technician can

---

[14]   An internal study preformed by Broadview indicated that the CLEC (Broadview) issues a
corrected LSR after being queried 95% of the time.
[15]   Verizon has proposed to allow CLECs to download information, via an electronic interface or
GUI, from the same spreadsheet that Verizon will list the all the orders and associated lines for which the
CLEC has issued LSRs with respect to a given project.

1		only place the wire – this event is known as pre-wire. The CO Frame Technician
2		identifies the locations on the frame of the lines to be migrated, and the Connecting
3		Facility Assignments (CFA) of the CLEC's collocated equipment. The CO Frame
4		Technician then verifies that these locations agree with the information on the service
5		order, and pre-wires the new cross connections from the existing frame appearance of a
6		customer's line to the frame appearance of the CLEC's CFA. This pre-wire event is
7		performed at least two days prior to the cutover, so that Verizon can check for CLEC dial
8		tone on each of the CFA assignments.
9		Once the physical transfer has been completed, the frame technician removes the
10		old cross connection that connected the customer's line to Verizon's switch port and
11		terminates the pre-wired connection to the CLEC's CFA, thereby connecting the
12		customer to the CLEC's switch.
13	**Q.**	**PLEASE DESCRIBE WHAT OCCURS ON THE DAY OF THE ACTUAL**
14		**CUTOVER AFTER THESE PRELIMINARY STEPS HAVE TAKEN PLACE.**
15	A.	On the morning of the cutover, the RCCC technician/coordinator contacts the CLEC to
16		obtain authorization to proceed with the project. Once this authorization is received, the
17		RCCC documents the approval in WPTS and contacts the central office frame crew via
18		telephone to inform them that they can proceed with the physical cutover activity on the
19		frame. The actual cutover work performed by the central office frame technicians on the
20		frame, as describe above, is started at a time that the particular CLEC has pre-negotiated
21		with Verizon.
22	**Q.**	**ARE ALL OF THE LINES INVOLVED WITH THE PROJECT CUT OVER AT**
23		**THE SAME TIME?**
24	A.	No. The project is usually worked in groups of 20 lines at a time. Once the first 20 lines
25		are cut over to the CLEC's collocated equipment, the frame crew will call the RCCC to

1		identify the 20 lines on which the physical frame work has been completed. The RCCC
2		then calls the CLEC, who initiates software changes and a verification effort to insure
3		service is working as expected. A CLEC representative will then activate the local
4		number portability (LNP) software that informs the network that the telephone numbers
5		associated with these lines have been moved from the Verizon switch to the CLEC's
6		switch. Meanwhile, the RCCC will update WPTS to indicate that the cut is complete for
7		these 20 lines. After the frame crew contacts the RCCC, it selects the next 20 lines on the
8		spreadsheet and cuts them over to the CLEC. The process will continue in this manner,
9		working in groups of 20 lines until all the lines associated with the project have been
10		migrated over to the CLEC.
11	Q.	**WHAT HAPPENS IN THOSE INSTANCES WHERE THE CLEC DETECTS A**
12		**PROBLEM ON A LINE (OR LINES) THAT HAVE BEEN CUTOVER?**
13	A.	In cases where something goes wrong during the cutover and the CLEC discovers a
14		problem on the customer's line, within 24 hours of the order completion the CLEC will
15		inform the RCCC of the problem and request a "throwback." It is Broadview's and
16		AT&T's experience that "throwbacks" occur very rarely, much less than 0.3% of the
17		time.
18	Q.	**WHAT IS A THROWBACK?**
19	A.	A throwback is the process used to move an unbundled loop that was recently cut over to
20		a CLEC's switch and is experiencing a problem back to its original state to restore the
21		customer's service. This effectively reestablishes the customer as a UNE-P customer,
22		with dial tone from the Verizon switch. In these cases, the CLEC is required to issue a
23		supplement to the original LSR to establish a new cutover date to migrate the line once
24		again to the CLEC's switch.

1	Q	WHAT HAPPENS WHEN A CLEC IS INFORMED OF A TROUBLE ON ONE
2		OF THE LINES ASSOCIATED WITH THE PROJECT MORE THAN 24 HOURS
3		BEFORE THE PROJECT HOT CUT PROJECT COMPLETION?

4 A. If the problem is referred to Verizon within a time period greater than 24 hours but less

5 than 72 hours after the project is completed, the CLEC is instructed to call Verizon's 877-

6 HOT-CUTS number to resolve the problem. In instances where the problem is referred

7 to Verizon more than 72 hours after the project completion, the CLEC must contact

8 Verizon's Regional CLEC Maintenance Center (RCMC) to have the customer's service

9 restored.

10 Q. PLEASE DESCRIBE HOW THE PROJECT HOT CUT PROJECT IS CLOSED
11   OUT.

12 A. Once all of the physical frame work has been completed, the RCCC notifies the CLEC

13 via a phone call that the project is complete. The RCCC also enters the completion

14 notification information into WPTS and sends the confirmed complete project

15 spreadsheet to Verizon's Recent Change Memory Administration Center (RCMAC). The

16 RCMAC verifies that the telephone numbers associated with the project have been ported

17 and releases the customer's translations from the Verizon switch. The final step of the

18 process has the central office frame crew removing the disconnected wires from the

19 frame 24 hours after the project due date.

20   2.   **Problems with the Current Project Hot Cut Process**

21 Q. WHAT ARE AT&T'S CONCERNS WITH THE CURRENT PROJECT HOT
22   PROCESS THAT THE PANEL HAS JUST DESCRIBED?

23 A. There are a number of problems associated with the current process that lead to

24 inefficiencies and customer dissatisfaction. These problems include the following:

1 ?? The absence of a Project hot cut process for migrating UNE-P customer accounts in

2 cases where there is a line or lines on the account that are currently on non-copper

3 facilities.

4 ?? The lack of parity with Verizon for CLECs to obtain the TXNU assignment

5 information on CLEC-to-CLEC migrations.

6 ?? The various capacity limitations and restrictions that Verizon places on the Project

7 hot cut process.

8 ?? Verizon's lack of automated processes, redundant and/or unnecessary steps in the

9 process and the multiple handoffs between internal organizations.

10 ?? The scalability of the process is limited because of all the manual steps necessary to

11 accomplish a Project hot cut.

12 ?? There are no metrics to allow the Department and the CLECs to monitor Verizon's

13 Project hot cut performance.[16]

14 **Q. PLEASE EXPLAIN WHAT AT&T'S CONCERN IS WITH RESPECT TO THE**
15 **CUSTOMERS THAT ARE ON NON-COPPER FACILITIES.**

16 A. Customer lines that are on non-copper facilities such as IDLC systems do not have an

17 appearance on the MDF. Without such an appearance, these lines cannot be cutover to a

18 CLEC's collocated equipment using Verizon's current hot cut methodology. Therefore,

19 when a CLEC is identifying the accounts that it wants to include in a Project hot cut

20 project, it must first use Verizon's loop make-up database to identify whether any lines

21 associated with these accounts are on IDLC facilities so that they can be excluded from

22 the project. This is a significant problem. According to Verizon, approximately 16% of

1   all its access lines are on IDLC facilities.[17] Furthermore, approximately

2   <**PROPRIETARY INFORMATION BEGINS** XXX **PROPRIETARY**

3   **INFORMATION ENDS>** of hot cuts performed by Verizon are of lines originally on

4   IDLC facilities.[18]

5 Q.   **WHY IS THIS A PROBLEM IF VERIZON GIVES THE CLEC THE ABILITY**
6   **TO IDENTIFY THESE LINES BEFOREHAND USING THE LOOP MAKE-UP**
7   **DATABASE?**

8 A.   The lack of a process to include the accounts with lines on IDLC facilities in the Project

9   hot cut process is a problem for a number of reasons.

10   First, AT&T has found that Verizon's loop make-up database does not always

11   accurately represent the facilities that Verizon is using to provide service to a customer.

12   Because of the lack of quality in the database that Verizon has made available to the

13   CLECs, the CLECs will sometimes include accounts in a Project hot cut project that the

14   database indicated were all on copper facilities when, in fact, the lines are on an IDLC

15   system. When this happens, these accounts must be removed from the project and later

16   migrated using the individual hot cut method once Verizon has removed the loop from

17   the IDLC system and put it on a spare copper or UDLC facility.

18   Second, when the CLEC has a multi-line customer who has a single line on an

19   IDLC facility, the entire account must be removed from the project to insure that the

20   cutover will not impact the customer's service or features. For example, if the CLEC has

21   a 12-line account that was to be cut over in conjunction with a project and one of the 12

---

[16]   See IPT, at 38, where Verizon suggests that if the Department "wishes to address metrics issues related to batch hot cuts, they should be addressed in a metrics-related proceeding, rather than in this proceeding."

[17]   Response to Information Request ATT-VZ 1-30.

[18]   See Verizon's Response to Information Request ATT-VZ 1-29 (reporting "% IDLC of Hotcuts" for the period from November, 2002 through October, 2003).

1		lines is found to be on an IDLC system, all 12 lines must be removed from the project
2		and rescheduled at a later date, either using the existing individual hot cut process or
3		waiting until the minimum bogie is sufficient in the central office to include these 12
4		lines in a future Project hot cut project (assuming Verizon actually moved the offending
5		line off of the IDLC system).
6 7 8	Q.	**PLEASE EXPLAIN WHY THERE IS A LACK OF PARITY BETWEEN VERIZON AND THE CLECS FOR OBTAINING TXNU INFORMATION ON CLEC-TO-CLEC MIGRATIONS.**
9	A.	To understand this lack of parity it is first important to explain why this information is
10		necessary. When a CLEC wins a customer from another CLEC that is providing service
11		to that customer using UNE-L and its own switch, the "winning" CLEC must provide the
12		customer's POTS loop identification (the TXNU) on the LSR that it sends to Verizon.
13		Currently, unless the "losing" CLEC is willing to cooperate and supply this information,
14		the "winning" CLEC has no way of obtaining it. Even in cases where the "losing" CLEC
15		is willing to cooperate, no efficient, mechanized process exists for the exchange of this
16		information, nor can the winning CLEC always rely on the quality of the data it is
17		receiving because of the varying level of quality that exists among the CLEC inventory
18		databases.
19 20	Q.	**DOESN'T VERIZON FACE THE SAME PROBLEM WHEN IT WINS BACK A CUSTOMER FROM A UNE-L CLEC?**
21	A.	No. Because all of the customer loops terminate in Verizon's central office, Verizon has
22		an independent inventory of where each customer's loop terminates within the office and
23		the circuit identification ("ID") for all these loops. When an existing CLEC customer
24		wishes to migrate back to Verizon, all Verizon has to do is simply go into its own
25		inventory system to determine the TXNU assignment for the customer's loop. The

1   CLECs do not have parity access to this inventory database to obtain the same circuit ID

2   information.

3 **Q.** **WHY IS THIS LACK OF RELIABLE TXNU INFORMATION A PROBLEM FOR**
4   **THE PROJECT HOT PROCESS?**

5 A. Verizon will not accept the LSR from the "winning" CLEC unless the LSR contains the

6   customer's TXNU. As competition matures, more and more migrations are going to

7   involve customers moving their service from one CLEC to another. Unless the CLECs

8   have a means of obtaining reliable TXNU information in an efficient manner, these

9   migrations cannot be included in the Project hot cut process.

10 **Q.** **WHAT ARE THE CAPACITY CONSTRAINTS THAT VERIZON CURRENTLY**
11   **IMPOSES ON THE PROJECT HOT CUT PROCESS?**

12 A. Verizon currently limits the Project hot cut activity to one central office per manager's

13   area, and two central offices per geographic area on any given night.[19] The Verizon

14   definition of what a management area and geographic area constitutes was provided

15   earlier in this testimony. Additionally, Verizon typically requires a minimum of 30 lines

16   in the same central office for a CLEC to initiate a request for a Project hot cut. We state

17   "typically requires" because Verizon has never clearly defined what its minimum

18   requirement is. For example, AT&T has found in its experience that Verizon often

19   requires more than 30 lines before it will consider the job for a Project hot cut project.

20   As for its maximum requirement, Verizon has "a limitation of 150 cut-over lines per

21   central office per due date."[20]

---

[19] IPT, at 29.
[20] IPT, at 29.

1	Q.	**WHAT IS THE IMPACT OF VERIZON'S LIMITATIONS ON A CLEC'S**
2		**ABILITY TO MIGRATE ITS UNE-P CUSTOMERS OVER TO UNE-L USING**
3		**THE PROJECT HOT CUT PROCESS?**

4   A.   These limits are an overall, industry limit and not a per CLEC limit. This means that if a

5   particular CLEC has a Project hot cut project in a Verizon manager area or has two

6   scheduled in a particular geographic area, no other CLEC can schedule a Project hot cut

7   project in the same area at the same time. Thus, the 150 conversions from UNE-P to

8   UNE-L per night limit may lock up that manager's area for a considerable amount of

9   time before the Project hot cut project can be completed, thereby delaying additional hot

10   cuts needed by other CLECs or even the same CLEC for other customers.

11	Q.	**ARE THERE ANY OTHER CAPACITY LIMITATIONS THAT VERIZON**
12		**IMPOSES ON THE PROJECT HOT CUT PROCESS?**

13   A.   Yes. Verizon refuses to perform a Project hot cut project that spans multiple collocation

14   arrangements within the same central office.

15	Q.	**WHY IS THIS A PROBLEM FOR THE CLECS?**

16   A.   Through acquisitions or partnerships, many CLEC's have more than one collocation

17   arrangement within the same central office. Verizon's limitation of one collocation per

18   central office for a Project hot cut can prevent a CLEC from quickly reaching the 30-line

19   minimum required to qualify for a Project hot cut, because the lines that the CLEC has

20   that it wishes to cut over are spread across multiple collocation arrangements. In

21   addition, this restriction, and the one-CLEC-per-central-office-per-night restriction

22   prevents partnerships, such as the one that AT&T and Broadview have, from combining

23   their lines into a single project to facilitate meeting the minimum requirement.

PUBLIC VERSION

1	Q.	**IS THERE A TECHNICAL REASON WHY VERIZON IMPOSES THIS ONE**
2		**CLEC /ONE COLLOCATION ARRANGEMENT PER CENTRAL OFFICE**
3		**LIMIT?**

4   A.   No. This restriction makes the pre-wiring step a bit easier because all of the CFA

5   terminations for the single collocation arrangement will typically be in the same location

6   on the frame. However, considering that the actual service cutover is performed at the

7   location on the MDF where the customer's line terminates and that these line

8   terminations are at various locations on the frame, there is no good reason for this

9   restriction.

10	Q.	**PLEASE EXPLAIN AT&T'S AND BROADVIEW'S CONCERN FOR THE**
11		**MANUAL PROCESSES, UNNECESSARY STEPS AND MULTIPLE HANDOFFS**
12		**THAT ARE INVOLVED WITH THE PROJECT HOT CUT PROCESS.**

13   A.   Verizon's current process consists of multiple manual and sometimes redundant or

14   unnecessary work steps and handoffs between its various internal work groups and also

15   between Verizon and the CLECs. Though some of these manual steps, such as the

16   physical work on the frame, are the result of limitations that cannot be eliminated using

17   today's technology, many of these handoffs and manual steps can be eliminated or

18   mechanized through the simple process improvements that we recommend later in this

19   testimony.

20	Q.	**PLEASE EXPLAIN WHAT YOU MEAN BY THE STATEMENT THAT SOME**
21		**OF THESE MANUAL STEPS CANNOT BE ELIMINATED USING TODAY'S**
22		**TECHNOLOGY.**

23   A.   As described earlier in this testimony, today's frame technology requires the performance

24   of physical work on the frame in order to accomplish a hot cut regardless of whether the

25   individual or Project process is being used.

1	Q.	**WHAT, THEN, ARE THE MANUAL STEPS THAT CAN BE ELIMINATED**
2		**FROM THE PROJECT HOT CUT PROCESS?**

3   A.   Verizon's current process, as depicted in the "RCCC – Large Job Project Hot Cut

4   Process" description[21] produced in response to ATT-VZ-39, reflects various manual tasks

5   and work center handoffs that are inefficient and should be either eliminated or

6   mechanized. These steps include: i) the NMC's verification of the orders against the

7   CLEC-provided spreadsheet[22], ii) a manual review of the spreadsheet by RCCC,[23] iii) the

8   manual creation of a second spreadsheet in WPTS[24], iv) RCCC performs a MLT test[25]

9   and v) the numerous verbal (via phone call) or manual handoff communication steps that

10   occur between Verizon's internal work groups and between Verizon and the CLEC that

11   can be found throughout the process.[26]

12	Q.	**WHY ARE THESE MANUAL STEPS AND MULTIPLE HANDOFFS A**
13		**CONCERN?**

14 A.   They are a concern because they add unnecessary delay and costs to the process.

15   Additionally, any process that has multiple manual touch points is prone to error, which

16   not only increases costs but leads to customer dissatisfaction.

---

[21]   Document RCO 00-2083, dated 9/24/2003.

[22]   *See id.*, p. 8 (of 31).

[23]   *Id.*

[24]   *Id.*

[25]   *Id.*

[26]   Examples of some of these verbal communication steps, as indicated in document RCO 00-2083, include but are not limited to: the NMC sending the spreadsheet to the RCCC; the RCCC sending the spreadsheet to multiple other Verizon internal work groups, RCCC contacting the frame for verification of dial tone, RCCC communication to CLEC of no dial tone problems, RCCC documentation of all contacts made, RCCC contacting the CLEC prior to the cutover, RCCC contacting the frame to proceed with the cut, frame contacting the RCCC to inform them of their progress on the project, the RCCC contacting the CLEC to inform it of the progress of the project, RCCC notification of CLEC that project is complete, and the CLEC notification to the RCCC of a circuit problem.

PUBLIC VERSION

| 1 | Q. | DO THESE MANUAL STEPS IMPACT THE SCALABILITY OF THE PROJECT |
| 2 | | HOT CUT PROCESS? |

3 A.   Yes, they do. All of the problems that we have identified with the current process have

4   an impact on Verizon's ability to scale its process to be able to serve the mass market.

5   AT&T's scalability concerns are addressed in detail in the testimony of Mr. Falcone.

6	Q.	DOES VERIZON HAVE ANY CARRIER-TO-CARRIER METRICS THAT
7		PERMIT THE DEPARTMENT TO MONITOR HOW VERIZON IS
8		PERFORMING DURING PROJECT HOT CUT PROJECTS?

9 A.   No. Currently there are no performance measures or Performance Assurance Plan (PAP)

10   remedies that allow the Department to monitor Verizon's Project hot cut performance or

11   to penalize Verizon for poor performance in this area.

12 Q. HOW IMPORTANT ARE PROJECT HOT CUT METRICS?

13 A.   They are crucial – and these comments apply to Verizon's proposed Batch process as

14   well as to the Large Job process. Whatever processes are established as a result of this

15   proceeding, standards, measurements and penalties are needed to insure that Verizon

16   follows those processes and that they work as designed.   In the absence of such measures

17   and financial penalties, Verizon simply does not have the incentive to make a hot cut

18   process work. Metrics need to be addressed in this proceeding – metrics that will not

19   only measure Verizon's bulk hot cut performance but that will have strong penalties in

20   order to induce Verizon to perform hot cuts as seamlessly as possible, so that customers

21   in a post-UNE-P environment will not experience increased disruptions to their telephone

22   service

23   Verizon suggests that if the Department "wishes to address metrics issues related

24   to batch hot cuts, they should be addressed in a metrics-related proceeding, rather than in

1	this proceeding."[27] This is simply inconsistent with the TRO's mandate that seamless –
2	and therefore effective – low-cost bulk hot cut processes be established. Without metrics
3	there is no genuine process but only a promise by Verizon to do right by the CLECs – a
4	promise that costs Verizon nothing to break. Metrics must be established before a hot cut
5	process can be approved as TRO-compliant. The issue of metrics must therefore be
6	addressed in this proceeding, particularly since what is at issue is the possible reduction
7	of UNE-P in parts of Massachusetts – and therefore an explosion in the volume of hot
8	cuts that will be necessary to perform.

9   One simple consideration can illustrate, and reinforce, how important it is to

10   establish for bulk hot cut metric. Verizon's hot cut cost models assume that fully 23% of

11   initial hot cut orders will fall out for manual processing, *i.e.*, not flow through in

12   automated fashion to Verizon's back-end provisioning systems.[28] Specifically, Verizon

13   assumes that 23% of LSRs will fall out and require a manual query back to the CLEC,

14   and also that 23% of LSRs will fall out and require Verizon to create the order

15   manually.[29] And this is the assumed fall-out rate for only the *initial ordering stage* of hot

16   cuts.

17   3.   **Recommendations for Improving the Project Hot Cut Process**

18 **Q.**   **BEFORE YOU DESCRIBE YOUR ANALYSIS AND RECOMMENDATIONS,**
19   **PLEASE EXPLAIN WHETHER THE PROCESS IMPROVEMENTS THAT**
20   **AT&T AND BROADVIEW ARE PROPOSING HERE SATISFY THE**
21   **REQUIREMENTS IN THE TRO FOR A PROJECT HOT CUT PROCESS.**

22 A.   No, these recommendations do not satisfy the TRO's requirements. The

23   recommendations offered here were developed under the assumption that a CLEC could

---

[27]   IPT, at 38.
[28]   Verizon Response to Conversent-Vz 6-23. *See also* IPT, Exhibit III-A, Tabs 1, 3, 5, and 7, NMC line 4, column D

1   choose to perform Project hot cuts but UNE-P would remain available. Under the TRO,

2   CLECs may be forced to use Project hot cuts in an environment where UNE-P may no

3   longer be a long-term option for CLEC use to provide local service.

4   AT&T and Broadview have not, at least not yet, developed Project hot cut process

5   recommendations that satisfy the TRO's requirements. For reasons set forth in Mr.

6   Falcone's testimony, it is doubtful that any manual bulk hot cut process can be devised to

7   accommodate the scale and scope conditions that would exist in a fully competitive

8   market based on UNE-L without UNE-P.

9   **Q.   HOW WOULD YOU DISTINGUISH BETWEEN PRE- AND POST-TRO BULK**
10   **HOT CUT PROCESSES?**

11   A.   There are many operational and process details that must be identified and worked out in

12   a post-TRO bulk hot cut process, which must address the need for an entire industry to

13   operate in a world in which virtually every customer change of carrier is accomplished

14   through a manual hot cut process. Such a process necessarily would need to

15   accommodate, among other things, the conversion of IDLC loops, line-splitting, CLEC-

16   to-CLEC migrations and CLEC-to-Verizon migrations. In order to define and develop

17   these more expansive and robust processes, industry consultations are required, as are

18   new platforms and new methods of communication and coordination.

19   A process that meets the requirements of the TRO must also be appropriate for an

20   environment determined by decisions that the Department will issue in the future and that

21   are now unknowable. For example, Verizon's current Project hot cut process for the

22   most part involves only the migration of CLEC UNE-P customers to UNE-L service

23   (provided by the *same* CLEC) in an environment in which UNE-P remains generally

---

[29]   *Id.*

PUBLIC VERSION

1		available. If, in contrast, the Department were to determine that CLECs are not impaired
2		without unbundled switching so that even "rolling UNE-P" access was not necessary to
3		cure impairment and thus not available, then the improved process that would result from
4		AT&T's and Broadview's proposed recommendations would not be appropriate, for the
5		contemplated process relies on the availability of UNE-P as a CLEC option to acquire all
6		customers and "hold" them until conditions are appropriate for a Project hot cut.
7	**Q.**	**DO AT&T AND BROADVIEW CONTEND THAT THEIR PROPOSED**
8		**PROCESS IMPROVEMENTS WILL RESULT IN THE MOST EFFICIENT**
9		**FORWARD-LOOKING PROCESS FOR ACCOMPLISHING PROJECT HOT**
10		**CUTS?**
11	A.	No. Adoption of our recommended process improvements will result in the
12		implementation of the most efficient Project hot cut process that can be established
13		*assuming* the use of the technology and systems that Verizon currently utilizes, which are
14		*not* the most efficient technology and systems available. For example, Verizon performs
15		manual wiring connect and disconnect activities in the central office in order to migrate
16		local customers from a Verizon switch to a CLEC switch. In addition, the inherent
17		limitations of Verizon's systems and management practices, such as limitations on the
18		number and size of Project hot cuts that can be performed in a given day, prevent more
19		efficient practices from being implemented, even assuming that manual wiring activities
20		are required. While we believe that our proposed improved Project hot cut process is the
21		most efficient manual process that can be achieved in a short amount of time, it is not a
22		forward-looking process based on the best available technology and the practices of a
23		truly efficient ILEC. Other technology platforms would permit seamless and error-free
24		customer migrations at a fraction of the cost of the error-prone manual processes that will
25		remain even after adoption of the process improvements we propose.

1		There are also other processes that an efficient ILEC could implement but that
2		AT&T and Broadview have not proposed given Verizon's current performance
3		capability. For example, if we were confident that Verizon would perform scheduled hot
4		cut tasks at prearranged times without constant communication and verification, we
5		would propose a process that does not require as much coordination as the one we
6		recommend here. Our experience, however, makes us unwilling to propose such a more
7		efficient manual process.

8   In sum, AT&T and Broadview request that the Department adopt the process

9   improvements recommended here, but we do not contend that the resulting process

10   represents the most efficient forward-looking process for accomplishing Project hot cuts

11   under the standards of the TRO.

12 **Q.   PLEASE DESCRIBE YOUR RECOMMENDATIONS FOR IMPROVING**
13   **VERIZON'S CURRENT PROJECT HOT CUT PROCESS.**

14 A.   We recommend specific improvements that will make the existing, intensely manual

15   Verizon Project hot cut process substantially more efficient and seamless in an

16   environment where UNE-P remains available. Adopting our recommendations will

17   lower all parties' costs, reduce delays and errors in processing Project hot cuts, and

18   minimize service disruptions to customers.

19 **Q.   PLEASE SUMMARIZE THE MAIN IMPROVEMENTS THAT YOU**
20   **RECOMMEND.**

21 A.   The main improvements that we recommend fall into four categories.

22   ?? First, we recommend modifying and in some cases eliminating the capacity

23   constraints that Verizon imposes on the process. These constraints include the one-

24   cage-per-CLEC-per-central office constraint, which we shall abbreviate as the "one

25   cage" constraint, as well as the manager area and geographic area limits imposed by

1   Verizon. Additionally, Verizon must clearly communicate its standard minimum and

2   maximum daily limits for performing hot cuts, so that the Department may assess

3   their reasonableness.

4 ?? Second, the Project hot cut process should involve fewer manual — and often

5   unnecessary — steps and should instead incorporate greater automation of order

6   entry, order processing, and communication of information concerning the order

7   status for Project and individual hot cuts. This can be achieved through improved

8   usage of WPTS from the beginning to the end of the Project hot cut process. This

9   improved usage should include enhancing WPTS so that it electronically "pushes

10   out" information to CLECs (i.e., automatically sends out updates from WPTS)

11   without any manual action being performed to electronically flow through and

12   automatically update CLEC systems as soon as new information appears in WPTS.

13 ?? Third, at the end of the Project hot cut process, Verizon should notify CLECs

14   regarding completion of individual loop migrations within a project. This notification

15   should occur with all reasonable speed and in a manner that facilitates quick CLEC

16   post-cutover activity completion, such as activation of line number portability

17   ("LNP") to ensure that CLEC customers can begin receiving incoming calls as soon

18   as possible. Based on our recommendations, Verizon should provide notification

19   through the enhanced WPTS after each batch of 20 loops is migrated and the

20   notification should flow through to CLEC systems and trigger appropriate CLEC

21   actions. This recommendation assumes that there is no degradation in the intervals

22   between the actual cutover time and the notification by WPTS that a cutover has been

23   completed.

1		?? Fourth, Verizon should modify the procedures used to migrate from one CLEC to
2		another CLEC via UNE-L in a manner that is at parity with the process for migrating
3		a CLEC UNE-L customer back to Verizon.
4	Q.	**PLEASE DESCRIBE YOUR RECOMMENDATIONS TO ELIMINATE**
5		**VERIZON'S CAPACITY CONSTRAINTS ON PROJECT HOT CUTS.**
6	A.	Verizon's one-cage constraint should be eliminated because it unreasonably delays the
7		execution of Project hot cuts. The constraint bars a CLEC, or groups of CLECs, with
8		multiple collocation cages in a central office from aggregating lines across cages in a
9		Project hot cut project. This constraint has the potential to delay the period of time
10		required for a CLEC to reach the minimum number of lines necessary for Verizon to
11		perform a Project hot cut; it can cause Verizon to take multiple nights to execute projects
12		when one night might well suffice.
13		The one-cage constraint can also delay when *other* CLECs may have their Project
14		hot cuts executed. These Verizon-imposed delays on Project hot cuts are in no way
15		justified by any efficiency gains. As we noted earlier, while the one-cage constraint may
16		make the pre-wiring phase of the process *a bit* easier, this is of minimal importance in
17		light of the fact that all the cutovers occur on the same frame or set of frames in a given
18		central office. The minimal efficiency gain in the pre-wiring phase simply does not
19		warrant the delays caused by the one-cage constraint.

1 ?? Fourth, Verizon should modify the procedures used to migrate from one CLEC to

2 another CLEC via UNE-L in a manner that is at parity with the process for migrating

3 a CLEC UNE-L customer back to Verizon.

4 Q. **PLEASE DESCRIBE YOUR RECOMMENDATIONS TO ELIMINATE**
5 **VERIZON'S CAPACITY CONSTRAINTS ON PROJECT HOT CUTS.**

6 A. Verizon's one-cage constraint should be eliminated because it unreasonably delays the

7 execution of Project hot cuts. The constraint bars a CLEC, or groups of CLECs, with

8 multiple collocation cages in a central office from aggregating lines across cages in a

9 Project hot cut project. This constraint has the potential to delay the period of time

10 required for a CLEC to reach the minimum number of lines necessary for Verizon to

11 perform a Project hot cut; it can cause Verizon to take multiple nights to execute projects

12 when one night might well suffice.

13 The one-cage constraint can also delay when *other* CLECs may have their Project

14 hot cuts executed. These Verizon-imposed delays on Project hot cuts are in no way

15 justified by any efficiency gains. As we noted earlier, while the one-cage constraint may

16 make the pre-wiring phase of the process *a bit* easier, this is of minimal importance in

17 light of the fact that all the cutovers occur on the same frame or set of frames in a given

18 central office. The minimal efficiency gain in the pre-wiring phase simply does not

19 warrant the delays caused by the one-cage constraint.

20 Q. **ARE THERE ANY OTHER VERIZON-IMPOSED CONSTRAINTS ON**
21 **PROJECT HOT CUTS THAT SHOULD BE CORRECTED?**

22 A. If the Department were to restrict the availability of UNE-P in reliance on the ability of

23 CLECs to serve the mass market throughout Verizon territory, it would become

24 necessary to increase vastly Verizon's 150-line per day maximum – which AT&T and

25 Broadview have experienced – on the number of lines that can be placed in a Project hot

1		cut. Insofar as migrations from UNE-P to UNE-L service become more common, the
2		demand for Project hot cuts will increase exponentially, and it will prove impossible for
3		Verizon to satisfy that demand unless the line-per-day maximum is raised.
4		Similarly, it will become necessary to alter Verizon's geographic and
5		management area constraints on Project hot cuts by raising the number of central offices
6		per manager's area and per Verizon-defined geographic area within which projects may
7		be executed on a given night.
8	**Q.**	**YOU MENTIONED THAT VERIZON USES MINIMUM AND MAXIMUM-LINE**
9		**LIMITS FOR PROJECT HOT CUTS. WHAT SPECIFICALLY ARE THESE**
10		**LIMITS?**
11	A.	Verizon has never unequivocally communicated these standards,[30] nor does Verizon have
12		consistent standard practices regarding the boundaries for its line limits. Experience
13		indicates, however, that Verizon will not perform a Project hot cut involving fewer than
14		30 lines and that it will cut over no more than 150 lines per night per central office. We
15		recommend that Verizon be required to articulate these limits unequivocally, so that the
16		Department can make an assessment of their reasonableness.
17	**Q.**	**YOUR SECOND RECOMMENDATION CONCERNS IMPROVING THE**
18		**PROJECT HOT CUT PROCESS, PARTICULARLY BY INCORPORATING**
19		**GREATER AUTOMATION. HOW IS YOUR TESTIMONY ORGANIZED TO**
20		**ADDRESS THIS RECOMMENDATION?**
21	A.	We will follow the Project hot cut process in chronological order, from CLEC Order
22		Placement to Due Date Cutover Activities. As we proceed, we will focus on how
23		specific phases of the process can and should incorporate greater automation.

---

[30] Even in Verizon's Initial Panel testimony Verizon affirms that no more than 150 lines can be cut over per central office per due date – but then states that it has performed "Large Jobs" that went "beyond the 150 line/central office" limit. IPT, at 29.

1   Although our focus will be on automation, we will also note as we proceed other

2   recommended improvements to the process, such as giving CLECs electronic access to

3   the same information in a real-time manner at parity with Verizon's access through its

4   Loop Facilities Assignment Center ("LFACS") database, so that CLECs obtain more

5   reliable information on loop facilities.

6 Q.   **BEFORE PROVIDING DETAILS, CAN YOU SUMMARIZE THE GREATER**
7   **AUTOMATION THAT YOU RECOMMEND?**

8 A.   Yes. We recommend enhanced usage of WPTS. WPTS can serve both as an interface

9   for communications between Verizon and CLECs and as a mechanism for relaying orders

10   and information from one Verizon work center to another.

11 Q.   **WHAT SHOULD A CLEC DO BEFORE INITIATING A PROJECT HOT CUT**
12   **REQUEST?**

13 A.   As it currently does, a CLEC should analyze customer profiles to qualify customers for a

14   project hot cut. This is accomplished by screening out customers who cannot be

15   migrated via a Project hot cut project because they are served on non-copper facilities, in

16   particular, IDLC loops.

17   It is worth noting how this screening process works today. Where a customer has

18   IDLC loops, Verizon's current practice dictates that the entire customer account be

19   removed from the Project hot cut even if others of the customer's lines are provisioned

20   over copper loops. In a post-UNE-P environment, this exclusion can become a major

21   disrupting force in any bulk migration process. Even under current scale conditions, it

22   remains a problem.

| 1 | Q. | **ARE THERE ANY DIFFICULTIES ASSOCIATED WITH THIS SCREENING** |
| 2 | | **PROCESS THAT ARE BEYOND THE CLECS' CONTROL?** |

3   A.   Yes. A CLEC's screening efforts are only as reliable as the information available to it.

4   At present a CLEC can identify customers served by non-copper facilities only by

5   querying Verizon's loop make-up database. It has been AT&T's and Broadview's

6   experience, however, that the information contained in the loop make-up database is less

7   reliable than the LFACS database that Verizon uses to determine facility types. With the

8   LFACS database, Verizon is able to determine quickly that a particular customer is

9   served by an IDLC loop even though the loop make-up database does not contain this

10   information. The loop make-up database thus seems to contain outdated, inaccurate

11   information about facilities serving customers, and this can cause CLECs to include in

12   their requests customers who cannot be migrated via a Project hot cut.

13   Q.   **WHAT DO YOU RECOMMEND TO ADDRESS THIS PROBLEM?**

14   A.   Verizon must supply CLECs with accurate and up-to-date information about customer

15   facilities. We believe that the simplest way to resolve this problem is for Verizon to give

16   CLECs access real-time access to the same information contained in the LFACS

17   database, thereby enhancing accuracy in the CLECs' screening process. In any event,

18   Verizon must bear full responsibility for the costs and operational difficulties experienced

19   by CLECs due to the inaccuracies in Verizon's loop make-up database. That is, Verizon

20   must bear full responsibility for converting and cutting over in a timely fashion any IDLC

21   loops that may be included in a Project hot cut project request due to inaccuracies in its

22   loop make-up database. The cutovers should occur no later than the project due date, and

23   Verizon should not impose on CLECs any additional costs to migrate the IDLC loops to

1		copper facilities nor any extra service order or other charges resulting from loop make-up
2		database errors.
3	**Q.**	**HOW SHOULD A CLEC INITIATE A PROJECT HOT CUT REQUEST TO**
4		**VERIZON?**
5	A.	The order entry process should incorporate WPTS. Instead of the current practice of
6		placing a phone call to Verizon's National Marketing Center (NMC), a CLEC should
7		input directly into WPTS the scope of the project it wants Verizon to perform. This
8		includes identifying the central office in which the project is to take place, the number of
9		lines that are to be cut over, and the date when the CLEC would like the cutovers to take
10		place. All of this information should be submitted to Verizon via WPTS. WPTS should
11		then automatically notify Verizon downstream provisioning work centers and systems
12		regarding the project and its scope, such that the project can take place within 15 days of
13		the CLEC's request.
14	**Q.**	**HOW SHOULD THIS REQUEST BE INITIALLY PROCESSED?**
15	A.	The initial processing should also involve communication through WPTS. The NMC
16		will assign a project identification code (ID) to the request. The NMC should then
17		determine the availability of Verizon resources to execute the project. Rather than having
18		to call various Verizon departments to determine resource availability, the NMC should
19		be able to consult Verizon's Work Force Administration ("WFA") OSS for this
20		information. That is, Verizon's downstream OSSs should contain up-to-date information
21		as to the status of other work activities and Verizon resources so that the NMC can
22		determine resource availability with minimal effort.
23		Resources permitting, the NMC can schedule and confirm with the CLEC via
24		WPTS the Project hot cut project date requested by the CLEC. If resource constraints do

1		not permit the CLEC-requested date, the next closest date should be made available. The
2		NMC should input this due date, along with the project identification into WPTS, which
3		will communicate the project information to the CLEC via an "electronic push." We do
4		not mean to suggest here that Verizon can routinely fail to deliver cutover service within
5		the 15-day interval by claiming lack of resources. The primary point is that Verizon must
6		staff adequately so that it can deliver hot cuts on the schedule agreed to by the industry.
7	Q.	**WHAT DO YOU MEAN BY "ELECTRONIC PUSH" OF THE PROJECT**
8		**INFORMATION?**
9	A.	An "electronic push" of information is a system enhancement that will provide the CLEC
10		with real-time electronic updates in a user friendly format of the status for all project
11		items, without requiring dedicated CLEC personnel to continuously re-access the
12		Verizon's WPTS system, refresh the screen continuously for updates, and manually
13		update its internal systems. Instead, Verizon's WPTS should "push" changes of
14		information electronically to the CLEC, whose systems will receive the new information
15		and forward it to relevant CLEC personnel.
16	Q.	**AFTER THE DUE DATE HAS BEEN ESTABLISHED, HOW SHOULD SERVICE**
17		**ORDERS BE GENERATED?**
18	A.	To a large extent, service orders should be generated as they are now. The first step will
19		remain CLEC issuance of EDI LSRs that reference the due date and the Project hot cut
20		project identification. Once these are sent over to Verizon, Verizon's Service Order
21		Processor ("SOP") should process them automatically, without requiring dedicated CLEC
22		personnel to access Verizon's WPTS system, refresh the screen continuously for updates,
23		and manually update its internal systems. The LSRs will fall into two categories.

1   As noted earlier, the vast majority (99%) of the LSRs will be unproblematic and

2   will simply flow through Verizon's systems. The SOP will automatically, without human

3   intervention, generate internal service orders.

4   However, some LSRs will not flow through due to circumstances beyond the

5   CLEC's control. We have already observed that some customers served by IDLC loops

6   will be erroneously included in projects due to inaccuracies in Verizon's LMU database.

7   Other LSRs will fall out due to Verizon-imposed constraints on automated processing.

8   For example, Verizon's OSS is not designed to handle LSRs involving more than twenty

9   lines. Therefore, LSRs involving more than twenty lines fall out for manual processing

10   and validation. This will not be a sustainable limitation in any case where the scale of

11   UNE-L orders significantly increases.

12 **Q.**   **SHOULD CLECS INCUR ADDITIONAL CHARGES FOR THE PROCESSING**
13   **OF SUCH LSRS?**

14 A.   No. The LSRs just described fail to flow through for artificial reasons beyond the control

15   of CLECs. Under these circumstances, CLECs should not incur extra charges.

16   Additionally, Verizon can improve the flow through rate by making system

17   enhancements to make more order types eligible for flow through and by insuring that its

18   downstream systems are available for the processing of these orders.

19 **Q.**   **WILL LSRS FALL OUT FOR REASONS ATTRIBUTABLE TO CLECS?**

20 A.   If this happens, it will happen *very* rarely because the customers being migrated under the

21   Project hot cut process at issue here are current CLEC customers who are being

22   transferred from UNE-P to UNE-L service. The CLEC, therefore, already possesses

23   precise customer information, and its LSRs will necessarily be of the highest quality.

24   Furthermore, CLECs that are doing Project hot cuts are sending customer UNE-L LSR

1	orders via the EDI system interface, thereby avoiding typical typographical errors that
2	may occur if the orders are placed via the Verizon Web GUI.

3 **Q. ARE SPREADSHEETS NECESSARY FOR THE PROCESSING OF SERVICE**
4 **ORDERS?**

5 A. No. Spreadsheets are a legacy of the procedure set up before WPTS was established.

6 However, Verizon currently still requires the CLEC requesting a Project hot cut to

7 provide an Excel spreadsheet listing the lines to be cut over. This is so that the NMC and

8 then the RCCC may manually review the spreadsheet and coordinate correction of any

9 errors. The spreadsheet serves as a verification tool for Verizon management to monitor

10 the progress of each item within the cut.

11 Today, Verizon is able to generate its own project spreadsheet via a download of

12 information from WPTS that it uses for internal verification and monitoring purposes. If

13 the CLECs become able to obtain a similar download of information from WPTS in a

14 useable system format, the CLECs can take over the responsibility for validating that all

15 of its Project hot cut orders have been identified within Verizon's internal systems.

16 **Q. WHAT SYSTEM MODIFICATIONS DO YOU RECOMMEND TO IMPROVE**
17 **THE METHOD FOR ASSIGNING WORK DURING EXECUTION OF THE**
18 **PROJECT HOT CUT?**

19 A. The work assignment phase of the Project hot cut process consists of giving various

20 workgroups — including CLEC workgroups, which have a role to play in the Project hot

21 cut process — task instructions and the detailed information they need to complete their

22 tasks. As noted previously, at present the RCCC plays a large role here. The RCCC is

23 responsible for manual creation of work assignments and project administration. This

24 includes the RCCC's role in manually entering project information into WPTS and

25 manually distributing spreadsheets containing project details to workgroups. The

1   RCCC's role can and should be greatly diminished, since these work assignment

2   functions lend themselves to much greater automation. Automation can be applied both

3   in initial work assignments and in work assignment modifications that arise in response

4   to information communicated through enhanced usage of WPTS.

5 **Q. PLEASE DESCRIBE AUTOMATION IN THE GENERATION OF WORK**
6   **ASSIGNMENTS UNDER YOUR PROPOSED PROCESS.**

7 A. Based upon the information included in the CLEC's LSR and Verizon's internal service

8   orders, Verizon's OSS should automatically populate into WPTS the information for each

9   line cut in a project after service orders have been created. Verizon's current OSS has the

10   intelligence to determine what work needs to be assigned and to whom. The OSS will

11   then automatically assign system resources to the project, and notify the RCCC of any

12   trouble in making such assignments. Here, the RCCC Technician must assist the OSS by

13   manually resolving such troubles, but the automation involved where there are no

14   troubles constitutes a big efficiency gain over the present reliance on the RCCC.

15 **Q. WHY IS IT CRITICAL TO HAVE ACCESS TO PROJECT AND ITEM STATUS**
16   **CHANGES DURING THE PROJECT HOT CUT PROCESS?**

17 A. Each labor group that is part of the Project hot cut process (including the CLEC) needs to

18   know when order statuses change, because this information is central to managing the

19   Project hot cut process. Today, Verizon's OSS allow only its labor groups this visibility.

20   Status changes should be entered into WPTS so that they may be automatically

21   communicated both to Verizon and to CLECs workgroups. This means that CLECs as

22   well as Verizon should be able to input updated information into WPTS. These

23   automated updates are quick and reliable and lead to quick and reliable responses.

24   Armed with up-to-date information, the Verizon and CLEC workgroups can respond

25   quickly and appropriately to changes in status.

PUBLIC VERSION

| 1 | Q. | **MUST WPTS BE IMPROVED TO PERFORM THIS COMMUNICATIONS** |
| 2 | | **FUNCTION?** |

3   A.   Yes. SOP and WPTS should communicate with each other. Data from SOP concerning

4   project item information should be automatically imported into WPTS so that interested

5   parties, including the CLEC, can stay on top of project details and respond appropriately

6   to developing problems.

7   As we have already indicated, moreover, WPTS should further be improved so

8   that updated information is electronically pushed out toward CLECs. That is, Verizon

9   should modify WPTS so that Verizon can communicate with CLECs system-to-system.

10   WPTS should electronically send out updated information to CLECs as soon as the

11   information is received, and it should send out this information in such a fashion as to

12   trigger automatic responses by CLECs. For instance, when Verizon performs dial-tone

13   checks and finds there is "no dial-tone" from the CLEC side, the CLEC has 24 hours to

14   resolve a WPTS "no dial-tone" notification from the Verizon. If WPTS is able to push

15   information to the CLEC system, the CLEC can immediately respond, rather than relying

16   on dedicated personnel monitoring and searching for changes in WPTS to "catch" this

17   notification.

18   WPTS should also have indicators for jeopardies and/or incomplete order status

19   so that such information gets automatically communicated to CLECs as it is received.

20   Upon receipt of automated notifications through WPTS, a CLEC can take suitable action

21   to complete its internal work on the project hot cut or initiate action by the correct

22   Verizon department(s), as required.

1 2 3	Q.	**PLEASE SUMMARIZE THE BENEFITS THAT WILL RESULT FROM THE IMPROVEMENTS TO THE PROJECT HOT CUT PROCESS THAT YOU HAVE JUST RECOMMENDED.**

4 A. Greater automation in updating CLECs and Verizon workgroups as to project and item

5 status will eliminate unnecessary procedures and costs, reduce the errors that attend

6 manual processes, and increase the efficiency of the Project hot cut process. As a result,

7 Verizon will be able to perform not only more efficiently, but Verizon should also be able

8 to manage larger and more frequent Project hot cuts.

9 Q. **ARE THERE ANY CURRENT STEPS IN THE PRE-WIRING PHASE THAT**
10 **YOU RECOMMEND ELIMINATING?**

11 A. Yes. At present Verizon performs Mechanized Loop Testing ("MLT") to check for line

12 problems before lines are pre-wired for cutover. This check is redundant. First, if any

13 line problems affect a CLEC customer's service, the customer will alert the CLEC

14 provider of local service. So, the CLEC will already know if a problem exists. Second,

15 Verizon should be aware of any other problems, since it performance MLTs as part of its

16 routine preventative maintenance programs. If, however, Verizon insists on performing

17 one, no charge for this should be passed on to CLECs.

18 Q. **WHAT CHANGES TO DUE DATE CUTOVER ACTIVITIES DO YOU**
19 **RECOMMEND?**

20 A. If WPTS communications are properly designed and operated, it is unnecessary for

21 Verizon to contact the CLEC for final authorization prior to commencing the actual

22 migration. Rather, the CLEC should communicate its readiness for actual migration by

23 inputting this information into WPTS, which will push this information out to Verizon.

24 After making the necessary final checks, such as ensuring that all lines in the project are

25 fully provisioned and ready for cutover, the CLEC can update WPTS directly, indicating

26 to Verizon that it should commence cutover activities pursuant to the lines associated

1   with the Project hot cut. Final authorization communication can thus occur

2   electronically, without RCCC involvement.

3   Similarly, Verizon's frame technicians should be given access to WPTS so that

4   they can update the system with project completions on a real time basis, thereby

5   eliminating redundant calls to the RCCC for WPTS updates. Clearly, it is not efficient or

6   necessary to relay information from one work group to another via telephone, when the

7   technician who performs the task has the ability to electronically update the system that

8   will notify the relevant Verizon and CLEC workgroups simultaneously. Again, quality

9   measures and controls should be in place to ensure that there are no unnecessary delays

10   between the actual cutover activity and the WPTS update to the CLEC.

11   Q.   **DO YOU RECOMMEND ANY OTHER CHANGES IN DUE DATE CUTOVER**
12   **ACTIVITIES?**

13   A.   We recommend that CLECs receive faster and more efficient notification of completed

14   cutovers.

15   Q.   **WHAT SYSTEM MODIFICATIONS DO YOU RECOMMEND FOR THE DUE**
16   **DATE CUTOVER ACTIVITIES THAT OCCUR AT THE END OF THE**
17   **PROJECT HOT CUT PROCESS?**

18   A.   A line that has been migrated from UNE-P to UNE-L service does not become fully

19   operational until the CLEC has activated local number portability on that line. Therefore,

20   in order to minimize service disruptions to customers, a CLEC should receive real time

21   notification of completed cutovers. A CLEC should not have to wait for the frame

22   technician to complete a set of 20 cutovers and then place a phone call to the RCCC, who

23   in turn must contact the CLEC as is currently the case. In lieu of this inefficient process,

24   frame technicians should be given access to WPTS either through hand-held devices or

25   through WPTS terminals placed in strategic locations in the frame area. In this way, the

PUBLIC VERSION

1		frame technicians can update the system in real time as they perform their cutover work.
2		Once notified, WPTS should automatically push this data to the CLECs and other
3		downstream internal systems. This would allow the CLEC systems to automatically
4		activate the local number portability transaction, ensuring the CLEC customer service
5		disruptions are held to a minimum time interval.
6	Q.	**WHAT ARE THE BENEFITS OF THE MORE EFFICIENT NOTIFICATION**
7		**PROCEDURE JUST DESCRIBED?**
8	A.	The more efficient notification procedure we recommend minimizes the time when
9		customers cannot receive calls. The procedure also speeds up a CLEC's service
10		verification process. A CLEC receiving more efficient notification will be able to
11		ascertain problems arising from cutovers more quickly, and therefore be able to act more
12		quickly to resolve them.
13	Q.	**HOW MAY THE PROCESS FOR CLEC-TO-CLEC UNE-L MIGRATIONS BE**
14		**IMPROVED SO THAT THEY ARE AT PARITY WITH UNE-P TO UNE-L**
15		**MIGRATIONS?**
16	A.	As noted earlier in this testimony, one CLEC typically does not know the TXNU of a
17		customer that it wins from another CLEC. Verizon, however, does know the TXNU of
18		the customer and at present it does not share this information with CLECs. Yet, as part
19		of a Project hot cut process, without this information Verizon will not accept the
20		"winning" CLEC's completed LSR. Verizon will, however, use its internal information
21		for the benefit of its own retail operations when it wins a customer from a UNE-L CLEC.
22		So that CLEC-to-CLEC Project hot cuts may be facilitated, Verizon should be
23		required to provide CLECs with access to information, so that any "winning" CLEC can
24		supply this information on its LSRs during a CLEC-to-CLEC loop migration with at least
25		approximately the same efficiency and reliability that Verizon can obtain for itself.

PUBLIC VERSION

1   Alternatively, Verizon should be required to accept these type of orders without the

2   TXNU information.

3 **Q.**   **PLEASE PROVIDE A DESCRIPTION OF THE SPECIFIC BENEFITS TO**
4   **CLECS OF THE PROPOSED SYSTEM AND PROCESS IMPROVEMENTS TO**
5   **THE PROJECT HOT CUT PROCESS.**

6 A.   Every CLEC must be able to represent itself to customers as a credible

7   telecommunications carrier that can deliver quality services at affordable (and cost

8   effective) prices. As such, in a wholesale environment where part of the network upon

9   which CLECs must rely is owned, operated and maintained by another entity, it is

10   extremely important to manage interactions by implementing efficient and automated

11   workflows. Procedures that minimize manual processing and interaction between and

12   among the telecommunications industry and that maximizes automated system-to-system

13   communications, reduces service disruptions that occur in today's highly manual hot cut

14   process. The Project hot cut process recommendations discussed above, represent an

15   environment in which CLECs will benefit greatly by knowing the exact progress of

16   individual project items as well as by being automatically alerted through electronic,

17   user-friendly system interfaces to conditions that impact the customer as well as the

18   provider of local service.

19 **Q.**   **WOULD IMPLEMENTATION OF YOUR RECOMMENDATIONS BENEFIT**
20   **VERIZON?**

21 A.   Yes. Verizon would experience significantly reduced labor expenses and error rates

22   associated with the Project hot cut process.

23 **Q.**   **DO YOU HAVE A VISUAL DEPICTION OF AT&T'S PROPOSED**
24   **RECOMMENDATIONS TO ENHANCE VERIZON'S PROJECT PROCESS?**

25 A.   Yes. Attachment A to this testimony is a visual depiction of the proposed Project hot cut

26   process with the enhancements discussed above.

PUBLIC VERSION

1	Q.	ARE THERE ANY OTHER POINTS THAT YOU WOULD LIKE TO MAKE
2		REGARDING THE PROPOSED PROJECT HOT CUT PROCESS AND ITS
3		IMPROVEMENTS OVER THE CURRENT PROCESS?

4   A.   Yes. The changes we have proposed can materially improve the existing hot cut process

5   and reduce its costs. But its value is limited to the scale of current operations. To the

6   degree that even the enhanced version of the current process, described here, involves

7   manual steps, it delays the completion of Project hot cuts and increases the possibility of

8   error. Such a process will never be readily capable of handling the vastly increased

9   volume of hot cuts that would become necessary if CLECs were required and

10   commercially capable of competing with Verizon in the mass market, offering UNE-L

11   service. A hot cut process that utilizes an electronic means of migrating loops between

12   and among carriers is the only solution for this future environment.

13   **B.   Verizon's "Batch" Hot Cut Process**

14	Q.	DOES THE BATCH HOT CUT PROCESS PROPOSED BY VERIZON PROVIDE
15		ANY ADVANTAGES OVER VERIZON'S EXISTING OR PROPOSED LARGE
16		JOB PROCESS?

17   A.   No. For any carrier that expects to have reasonable volumes, Verizon's Batch hot cut

18   process provides no advantages over its Project process. To the contrary, the Batch

19   process presents serious disadvantages not presented by the Project process. Neither

20   AT&T nor Broadview would be willing to use the Batch hot cut process as proposed.

21   We would prefer to continue using the Basic process where we do not have the requisite

22   volumes and the Project process where we have the requisite volumes. Indeed, from an

23   operational perspective, those are the only options that we realistically can use.

24   Unfortunately, Verizon has sought to discourage us from using the Project process

25   when we have the requisite volumes, because it has priced that process *above* the price of

26   the Basic process.

1 Q. **BEFORE DISCUSSING THEM IN DETAIL, PLEASE HIGHLIGHT THE**
2 **MAJOR PROBLEMS UNIQUE TO THE BATCH HOT CUT PROCESS.**

3 A. The major problems with Verizon's proposed Batch hot cut process are as follows:

4 ?? It deprives CLECs of control over our end-user customers' experience in three

5 essential respects:

6 ??Inability of customers to make changes to their accounts for up to 35 business

7 days;

8 ??Inability to control the time of day, and day of week, that customers' service will

9 be interrupted – and be put at risk for greater interruption – by a hot cut;

10 ??Inability to monitor the quality of the cut during the critical period between the

11 cutover of the loop and the activation of the number port at NPAC;

12 ?? No operational processes, methods and procedures, or system messages have been

13 defined, documented, tested or operationalized;

14 ?? No experience of "live production" operations in a real world environment;

15 ?? No control over, and complete uncertainty with respect to, the cost of the "UNE-P-

16 like" service arrangement required to use the batch process for new customers;

17 ?? A total lack of CLEC control over the sequence in which the lines of a multi-line

18 order are cut;

19 ?? A lack of pre-wiring and dial-tone checks, which gives Verizon no "margin of error"

20 if something goes wrong on the day of the cut;

21 ?? No provision at all for handling IDLC loops within the Batch process, and the

22 proposed price under the Basic process for converting IDLC loops is not

23 commercially viable;

24 ?? No provision for handling CLEC-to-CLEC migrations; and

PUBLIC VERSION

1   ?? As with the Project process, a lack of metrics and penalties that would ensure a

2   Verizon commitment to the process it proposes.

3   **Q.   YOU STATED THAT THE BATCH PROCESS LIMITS THE ABILITY OF**
4   **   CLECS TO PERMIT CUSTOMERS TO MAKE CHANGES TO THEIR**
5   **   ACCOUNT FOR A PERIOD OF UP TO 35 BUSINESS DAYS. PLEASE**
6   **   EXPLAIN THIS AND WHY IT IS A PROBLEM.**

7   A.   We understand that in the Batch process Verizon will place a customer on UNE-P or on

8   an "interim UNE-P-like service"[31] arrangement for a holding period of up to 35 business

9   days, i.e., roughly seven weeks.[32] During this initial holding period when the customer is

10   on such an arrangement, an order would be pending against the customer's account to

11   move that customer's line to a UNE-L arrangement and, as a result, no service changes

12   would be permitted until the pending order is either cleared or cancelled.[33]

13   It is our experience that the initial two to three months after a customer initiates

14   services with a CLEC is the most critical period for the CLEC to establish credibility

15   with its new customer. It is during this period that new customers evaluate their new

16   carrier most carefully. Stated succinctly, first impressions are important. During this

17   period, customers are most likely to leave in response to any problems they experience in

18   their service. It is also common during this period that the customer will seek to alter

19   their service, as it finds new features that it does – or does not – want. Hence, the number

20   of change orders submitted by customers in the first weeks after initiating service is quite

21   high. Verizon proposes to prevent CLECs from processing customer change orders

---

[31]   IPT, at 35.
[32]   IPT, at 32. Verizon says that a CLEC "would have the *option* of transferring the customer to
UNE-P," or "to a service functionality similar to UNE-P" in areas where Verizon is relieved of its
obligation to provide mass market local switching as a UNE. *Id.*, at 34-35 (emphasis added). But the
"option" of which Verizon speaks is no real option where the alternative to accepting a new customer and
putting the customer into a UNE-P (or UNE-P-like) holding arrangement for up to seven weeks is not to
accept the customer.

1   during this period.   The holding period before conversion to UNE-L creates a potential

2   problem for every new customer during this critical initial period: new customers will be

3   unable to make changes to their account; they will be unable to add or remove lines,

4   modify features or to do something as simple and common as a PIC change. They will

5   not understand why they cannot do so, and they will blame their new carrier for failing to

6   fulfill what, for them, seem perfectly reasonable commercial requests. This puts CLECs

7   at a significant competitive disadvantage if they must warn prospective customers that

8   after sign-up they will be unable to make a change to their phone service for a period of

9   up to 35 business days. (Indeed, we cannot be confident of this limit because Verizon has

10   proposed no metrics or penalties for failure to meet its stated maximum.)

11 **Q.**   **WHY CAN'T THE CLEC CANCEL THE PENDING UNE-L "ORDER", MAKE**
12   **THE CHANGES TO THE CUSTOMER'S ACCOUNT, AND THEN SUBMIT A**
13   **NEW UNE-L "ORDER"?**

14 A.   While it may be technically possible to do that, it is not commercially feasible. Verizon's

15   practice is to charge CLECs each time an order is made and then cancelled. Such "make

16   work" activities to essentially go in a circle to get back to where we want to be also adds

17   internal administrative costs to the CLEC's cost structure. But it is worse than that.

18   Every time a CLEC submits a UNE-L order to Verizon, it sets in motion a series of

19   events in Verizon's OSS that can be difficult to control. For example, a "disconnect"

20   order for the UNE-P arrangement is automatically generated. If the UNE-L order is

21   cancelled in order to make changes to the account, there is the risk that the disconnect

22   order associated with the now cancelled UNE-L order will not be caught and the

23   customer could lose service altogether. While this should not happen if everything is

24   working correctly, it is our experience – based on thousands of hot cuts – that everything

---

33   IPT, at 34, lines 17-20, and 36, lines 1-3.

PUBLIC VERSION

1		does not always work correctly. We have observed numerous occasions when disconnect
2		orders are not caught in time and customers lose their service. Given the many more
3		thousands of hot cuts that would be experienced in a world without UNE-P, we are quite
4		sure that the incidence of customer outages will go up, perhaps significantly, if CLECs
5		must cancel UNE-L orders each time one of their customers ask for a change on their
6		account within the initial holding period.

7 **Q. ARE THERE OTHER PROBLEMS ASSOCIATED WITH THIS HOLDING**
8 **PERIOD?**

9 A. Yes. Verizon has a very aggressive winback program. It is no secret, and Verizon is

10 surely aware, that customers are most likely to find dissatisfaction with their new carrier

11 in the first few months. We are concerned that Verizon will aggressively market to our

12 new customers at a time when our ability to make changes to their account is difficult,

13 expensive, and potentially service-disrupting. Verizon could use this holding period in

14 anti-competitive ways.

15 **Q. YOU STATED THAT THE BATCH PROCESS ELIMINATES THE ABILITY OF**
16 **A CLEC TO CONTROL THE TIME OF DAY, AND DAY OF WEEK, THAT A**
17 **CUSTOMER'S SERVICE WILL BE INTERRUPTED – AND PUT AT RISK FOR**
18 **GREATER INTERRUPTION – BY A HOT CUT. PLEASE EXPLAIN.**

19 A. At the time of the hot cut, our customers' service is at its most vulnerable. This is

20 precisely the time that their service is interrupted, and at risk for significant interruption if

21 anything goes wrong. CLECs need to have as much control as possible over both the

22 timing and the duration of the out-of-service condition.

23 The customer's service is impacted in two different ways as part of a hot cut: (1)

24 loss of dial tone and the concomitant ability to make and receive calls ("complete out-of-

25 service condition"); and (2) loss of the ability to receive calls ("partial out-of-service

26 condition"). In the first case, dial tone is lost because the customer's loop is disconnected

PUBLIC VERSION

1   from the Verizon switch and some period of time passes before it is reconnected to the

2   CLEC switch. In the second, even when dial tone is reestablished on the customer's line

3   from the CLEC switch, there can be a partial out-of-service condition because calls

4   directed to the customer's number will not be completed until there is a local number

5   portability "activate" order sent by the CLEC to NPAC to direct all calls bound for the

6   ported number to the CLEC switch. In addition, for Verizon's intra-switch calls to be

7   completed, Verizon must have established "ten-digit triggers" in its own switch.

8   Under Verizon's Batch process, CLECs lose all control over the timing and

9   duration of the complete out-of-service condition. With respect to timing, CLECs do not

10   know at what point in the day Verizon will disconnect the loop from its switch and take

11   the customer out of service. Indeed, CLECs will not even be able to control the day of

12   the week on which the cut will occur, a necessary requirement for some customers. In

13   short, CLECs cannot arrange with Verizon for the specific needs of a customer under the

14   Batch hot cut process.

15   Generally, residential customers prefer the complete out-of-service condition to

16   occur during the day, while businesses prefer evenings. Different businesses, however,

17   have different needs. Businesses, such as pizza shops, for example, prefer early daytime

18   periods for their complete out-of-service condition. Moreover, different residential

19   customers have different needs as well. For example, people who work out of their

20   homes do not want the cuts to take place during the day. Marketing to and acquiring new

21   customers is an expensive and difficult operation. It requires attention to detail and

22   individual customer needs.

1   It is not commercially feasible to solicit new customers without the ability to

2   accommodate their needs during the transition. With respect to duration, under Verizon's

3   Batch process, CLECs will have no way to know when the hot cuts will begin and how

4   long its customers are out of service, since Verizon's process does not provide for notice

5   to the CLEC as to when the cut begins and when it ends. We cannot be responsive to our

6   customers' calls asking when the out of service condition will begin if we don't know

7   when it will begin. We cannot be responsive to customer calls complaining of out-of-

8   service conditions when we do not know at any point in time what Verizon is doing to

9   our customers' service.

10 **Q.**   **YOU STATED ABOVE THAT UNDER VERIZON'S BATCH PROCESS CLECS**
11   **HAVE NO ABILITY TO MONITOR THE QUALITY OF THE CUT DURING**
12   **THE CRITICAL PERIOD BETWEEN THE CUTOVER OF THE LOOP AND**
13   **THE ACTIVATION OF THE NUMBER PORT AT NPAC. PLEASE EXPLAIN**
14   **WHAT YOU MEAN.**

15 A.   Under Verizon's Batch process, CLECs will lose control over when the ported number

16   gets activated in the NPAC database. In its initial testimony, Verizon states:

17   The cutover process will differ in one very significant way from the
18   current Large Job process. As a condition of utilizing the batch process,
19   CLECs would be required to authorize Verizon to submit the final
20   number-port activation order to NPAC in place of the CLEC. This will
21   virtually eliminate the need for coordination with the CLEC at the time of
22   the cutover. In order to facilitate this process, the CLEC will be required
23   to include in its DD-minus-3 sign-off a verification that it has created a
24   port order in the NPAC database for Verizon to activate on the due date.[34]

25   Only after the number port is activated in the NPAC database is the CLEC's new

26   customer able to receive telephone calls. During that interim period, CLECs' customers'

27   can make calls but they will not receive calls, thus resulting in a partial out-of-service

28   condition. Yet, in order to use Verizon's batch process, the CLEC would have to cede all

---

[34]   IPT, at 33.

1   control over when – *i.e.*, how long after the loop itself is cut over – the number port is

2   activated at NPAC. CLECs will be completely at the mercy of their principal competitor

3   to ensure that their customers' service is not compromised. Given that Verizon's

4   interests are, to say the least, not aligned with the interests of CLECs, such an

5   arrangement is completely unacceptable to AT&T and Broadview.[35] Even if there were

6   performance standards and penalties to create the correct incentives for Verizon to

7   activate numbers timely, it is doubtful that such an arrangement could be made

8   acceptable to AT&T and Broadview. This is, in part, due to the inability for performance

9   metrics to accurately measure the duration of the out-of-service condition. This is due to

10   the fact that the measurement of the period between the completion of the hot cut and the

11   activation of the number depends upon the self-reporting of Verizon technicians as to the

12   time of the hot cut, rather than automated time stamps.

13   **Q.   ARE THERE OTHER SERVICE QUALITY PROBLEMS THAT ARISE FROM**
14   **CLECS' LOSS OF CONTROL OVER THE NOTIFICATION OF NPAC?**

15   A.   Yes. CLECs also will lose the ability to test for connectivity after the line is cut and

16   before the number port is activated at NPAC. If there is no connectivity, this is the point

17   at which a "throwback" may occur. If the process proceeds to number port activation, it

18   becomes extremely difficult to restore service. Once the number port has been activated,

19   the restoration process becomes more complex, involves more "moving parts" and

20   restoration of service can take days instead of minutes. As a result, the costs to the

---

[35]   It is not necessary to assume that Verizon will have anti-competitive motives to sabotage the cut deliberately. Verizon simply has no economic incentive to staff, train and manage its operations to ensure that no delays occur at this stage. Any profit-maximizing firm will deploy resources where they produce the best return for the firm. Taking resources away from other activities to ensure that there are no delays in providing service to the customers of competitors is not something that Verizon has an incentive to do.

1　CLEC, both in internal resources and in damage to its reputation, are significant. The

2　costs to the customer are obvious.

3　This is not a trivial matter. Despite the testing for dial tone two days prior to the

4　date of the cut, we do experience lack of connectivity immediately following the cut.

5　Under the current process, when Verizon notifies the CLEC that the cut has happened so

6　that the CLEC can activate the number port, it also provides the CLEC with an

7　opportunity to test for connectivity immediately, which in turn provides critical valuable

8　minutes to resolve problems in a prompt and expeditious manner if they are on the CLEC

9　side. In the absence of the CLECs' participation at this stage, more throwbacks will

10　occur and – because they will occur after number port activation – will result in extended

11　and costly service interruptions. This aspect of the Batch process alone is sufficient to

12　make it unacceptable to AT&T and Broadview.

13　Indeed, it is hard to understand the benefit of such a proposal, given the negatives

14　it creates for CLECs and the fact that it does little to reduce Verizon's burdens. Because,

15　under Verizon's proposal, Verizon will notify NPAC following the cut instead of

16　notifying the CLEC, little is gained. An automated notification system between Verizon

17　and the CLECs should allow the CLEC to retain control over the NPAC notification

18　process without manual intervention on Verizon's part or associated costs.

19　**Q.**　**IN YOUR LIST OF CRITICISMS OF THE VERIZON BATCH PROCESS, YOU**
20　　　**EMPHASIZED THE CLEC'S LACK OF CONTROL. PLEASE EXPLAIN WHY**
21　　　**THIS IS AN IMPORTANT CONCERN.**

22　A.　CLECs are retail service providers. As such, our relationship to our customers is

23　paramount. It is critical that we be able to control as much as possible of our customers'

24　experience. Any time a third party is involved, we lose that control; we are at risk.

25　When Verizon inserts itself into our relationship with our customers and their service, we

PUBLIC VERSION

1   have everything to lose if things do not go right because the customer will blame its new

2   carrier for any failure in the migration process.

3   Verizon's Batch hot cut process runs counter to this central principle of our

4   business. We have not asked Verizon to take control over our customers' experience. In

5   proposing this process, Verizon is not offering a better process nor is Verizon offering a

6   process that we would utilize. Moreover, eliminating the ability of CLECs to control the

7   experience of their new customers means that the Verizon's proposed process will not

8   benefit customers.

9   **Q.**   **YOU STATED ABOVE THAT ONE OF YOUR MAIN CONCERNS WITH THE**
10   **BATCH PROCESS IS THAT NO OPERATIONAL PROCESSES, METHODS**
11   **AND PROCEDURES, OR SYSTEM MESSAGES HAVE BEEN DEFINED,**
12   **DOCUMENTED, TESTED OR OPERATIONALIZED. PLEASE EXPLAIN.**

13   A.   Any complex process involving the exchange of information and the coordination of

14   tasks between two operating entities requires clearly defined language and agreed upon

15   methods of communication. This means that every step of the process must be agreed on,

16   including when messages are required between the entities, how they will be delivered

17   and the details of the message content. Verizon's Batch cut proposal fails to offer any of

18   the specificity that is required to know whether and how this process will work in the real

19   world. There is not sufficient information to determine what CLECs will need to do and,

20   therefore, what internal costs it will impose on them and what impacts it will have on

21   their administrative structure. A few simple examples will illustrate this problem:

22   ?? By what method and manner do CLECs place a Batch hot cut order (e.g., what date

23   does the CLEC put on the initial order regarding the timing of the Batch cut and the

24   LNP?)?

1 ?? How do CLECs find, or "see," in WPTS that a particular order is part of a Batch with

2   specific schedule information?

3 ?? What is the system message (e.g., how is it delivered and where should CLECs look

4   for it), to notify CLECs that a particular order has been scheduled for cutover on a

5   particular day as part of a Batch?

6 ?? How do CLECs respond to the system message notifying them that an order has been

7   scheduled, that is, how do CLECs accept or decline?

8 ?? What happens to the order if the CLEC declines and/or elects to change the date of

9   the cutover?

10 Q. **YOU ALSO STATED THAT THERE HAS BEEN NO EXPERIENCE OF "LIVE**
11   **PRODUCTION" OPERATIONS IN A REAL WORLD ENVIRONMENT. WHAT**
12   **DID YOU MEAN BY THAT?**

13 A. No process requiring complex interplay between two different entities can be developed

14   in the abstract. Even after the details of the process have been thought through (i.e.,

15   defined, documented, tested and trialed in operation), it still must be utilized in a real

16   world environment for some period of time before, it can confidently be relied upon.

17   Certainly, it would be irresponsible to place the fate of hundreds of thousands of

18   customers in the hands of a process that had never been utilized on the scale required in a

19   post UNE-P world, until such a process had been demonstrated to work in that kind of

20   environment.

21 Q. **YOU STATED ABOVE THAT LACK OF CONTROL OVER, AND**
22   **UNCERTAINTY WITH REGARD TO, THE "UNE-P LIKE" ARRANGEMENT IS**
23   **A REAL PROBLEM. CAN YOU PLEASE EXPLAIN?**

24 A. Yes. The Batch process can be used for new customers only if a CLEC can acquire the

25   customer before the date of the cutover. This is because the date of the cutover to the

1   CLEC switch is unknown – and in the control of Verizon – at the time the customer

2   initially agrees to become a CLEC customer. Customers will not wait indefinite periods

3   of time for their new service arrangement. Under Verizon's Batch process, CLECs will,

4   therefore, acquire the customer on a UNE-P or "UNE-P like" service arrangement. If this

5   Department finds that CLECS are not impaired without Verizon-provided switching in a

6   geographic area, part of the cost of acquiring the customer under the Batch process will

7   be the cost of the "UNE-P-like" arrangement. Verizon stated in its initial panel testimony

8   that "subject to subsequent review by the Company" it would charge rates currently

9   applicable to UNE-P.[36]

10   The problem for CLECs is that we do not know what this potentially important

11   cost of using the Batch process will be in the future. In response to interrogatories,

12   Verizon was unwilling to provide us with a date by which it would "review" and

13   presumably determine a more permanent rate.[37] Moreover, although Verizon claimed

14   that the rate would be "in compliance with any and all applicable legal requirements," it

15   did not identify any requirements that it believes would limit its discretion in determining

16   this component of the cost of a Batch hot cut. It made clear, however, that it does not

17   believe that it is required to price this component at TELRIC.[38]

18   CLECs are, therefore, left with no certainty regarding the ultimate cost to them of

19   using the batch hot cut process, except the near certainty that at some point in the future ***it***

20   ***will cost more than TELRIC to purchase everything that is required to use the process***.

---

[36]   IPT, at 35.
[37]   Response to ATT-VZ 2-72.
[38]   *Id*.

1	Q.	YOU ALSO STATED ABOVE THAT LACK OF CLEC CONTROL OVER THE
2		SEQUENCE IN WHICH THE LINES OF A MULTI-LINE ORDER ARE CUT IS
3		A PROBLEM. PLEASE EXPLAIN.

4   A.   Business customers with more than one line often have established features that require

5   all lines to be working together. A "hunting" feature is a prime example of such an

6   arrangement. In these cases, a call to any one of a customer's lines will be redirected to a

7   free line if the called line is busy.

8   In certain situations, the hunting feature could be compromised or disabled by a

9   hot cut occurring as part of a Batch process. Some multi-line customers with the hunting

10   feature may have added lines over a long period of time. Lines added recently may

11   connect to the MDF at entirely different places on the frame than lines added earlier on.

12   When implementing a Batch hot cut, Verizon's technicians will likely move down the

13   frame cutting lines over in the order in which they appear on the frame. This could result

14   in some lines of the multi-line customer being cutover well before other lines. The effect

15   would be to disable or compromise the hunting feature during the time that some, but not

16   all, of the lines have been cut.[39] This is another example of problems that can occur when

17   CLECs do not have the ability to control the timing of the cut and when Verizon elects to

18   cut lines according to placement on the frame rather than by customer order.

---

[39] Under Verizon's batch process, the duration between the first line cut and the last line cut could be as long as 24 hours since Verizon proposes to do batch hot cuts without an appointed hour within a day. Verizon could, under its proposal, start a cut just after midnight on one shift and finish the batch just before midnight of the next day and still consider (thus report) its performance as "on time" even though this is a day-long outage from the customer's perspective.

1	Q.	YOU REFERRED TO THE FACT THAT THERE COULD BE PROBLEMS
2		CAUSED BY VERIZON'S FAILURE TO PRE-WIRE THE MDF AND TO
3		CONDUCT A DIAL TONE CHECK IN A BATCH HOT CUT PROCESS.
4		PLEASE EXPLAIN.

5 A.   Under the Batch process, Verizon will wire on the day of the cut. There is no pre-wiring.

6   We have serious concerns about the consequence to our customers' service of Verizon's

7   not doing the pre-wiring work and dial-tone check ahead of time. Our concern is that

8   Verizon has left itself no cushion, or margin of error, if problems are encountered at the

9   frame during the day of the hot cut. We are not concerned about the CLECs' ability to

10   deliver dial tone so much as we are concerned about the ability of Verizon to manage for

11   unexpected contingencies that could affect its ability to do the work on the day of the cut,

12   such as snowstorms or other weather emergencies, unexpectedly high absenteeism, or an

13   unusually high incidence of problem cuts in a particular central office on a particular day.

14   As a theoretical matter, it may be reasonable to assume greater risks to reduce hot cut

15   costs. However, the rates that Verizon is proposing for its Batch process are so high that

16   CLECs gain nothing from the increased risk created by lack of pre-wiring and dial tone

17   checks in Verizon's batch process. Moreover, Verizon has provided no evidence that it is

18   capable of managing and minimizing the risks created by the removal of these quality

19   checks.

20	Q.	YOU STATED ABOVE THAT THE FAILURE OF THE BATCH PROCESS TO
21		INCLUDE THE HANDLING OF IDLC LOOPS IS A PROBLEM. PLEASE
22		EXPLAIN.

23 A.   As stated earlier, approximately 16% of Verizon loops are carried over IDLC.[40] That

24   means that about the same percentage of our customers are served on that basis.

25   However, we will be prevented from using the Batch process for a much greater

---

[40]   Response to ATT-VZ 1-30.

1   percentage of our customer orders, because a customer account cannot be included in a

2   batch hot cut *if any one of the lines on the account is an IDLC loop*.

3   Currently, UNE-P rates don't discriminate on the basis of IDLC, which means

4   that CLECs serve all customers using UNE-P equally, without regard to whether their

5   loops are IDLC or not. The Batch process, by design, excludes all such customers.

6   Moreover, to the extent that CLECs are successful in obtaining market share, the

7   percentage of remaining Verizon customers on IDLC will increase, because Verizon will

8   be constantly moving CLEC customers off of IDLC in order to hot cut them and putting

9   them on analog copper freed up by moving Verizon's customers onto IDLC. The Batch

10   hot cut process, therefore, by design, will exclude an increasing percentage of the end-

11   users to whom CLECs will be marketing.

12   This is a problem for our business that the FCC recognized in the TRO. In that

13   decision the FCC stated:

14   [W]e require incumbent LECs to provide requesting carriers access to a
15   transmission   path over hybrid loops served by Integrated DLC systems.
16   We recognize that in most cases this will be either through a spare copper
17   facility or through the availability of Universal DLC systems.
18   Nonetheless even if neither of these options is available, incumbent LECs
19   must present requesting carriers a technically feasible method of
20   unbundled access.[41]

21   Offering a process for hot cutting volumes of customers in a post UNE-P world that does

22   not even include the ability to hot cut IDLC loops is not a process that provides any

23   method of unbundled access, much less, a "technically feasible method of unbundled

24   access." A solution must be developed that allows the CLEC customer served on an

25   IDLC loop to remain on UNE-P indefinitely or provides additional UDLC or copper

---

[41]   TRO, ¶ 297.

1		loops in order to permit the migration of IDLC loops in a larger group (project or batch),
2		individually in a Basic hot cut process, or in an appropriately defined Batch process.
3	**Q.**	**YOU ALSO STATED ABOVE THAT THE FAILURE OF THE BATCH**
4		**PROCESS TO INCLUDE THE HANDLING OF CLEC-TO-CLEC MIGRATIONS**
5		**IS A PROBLEM. PLEASE EXPLAIN.**
6	A.	There are two problems. First, the FCC's TRO specifically requires that the Batch
7		process address CLEC-to-CLEC migrations.[42] Second, as CLEC market share increases,
8		we will increasingly be marketing to the customers of other CLECs, many of which will,
9		in a post UNE-P environment, be competing using Verizon loops. If Verizon's inherent
10		monopoly advantages are eventually eliminated, then there is no reason to expect that
11		Verizon will enjoy a predominant position in the market. Thus, to the extent that a Batch
12		hot cut process hypothetically *could* eliminate Verizon's inherent monopoly advantage –
13		which we do not believe could happen, as we have testified above -- so that CLEC
14		market share increases, the failure to provide an efficient, low cost process for CLEC-to-
15		CLEC migrations becomes increasingly important to AT&T and Broadview, as the
16		percentage of migrations that are CLEC-to-CLEC grows.
17	**Q.**	**FINALLY, YOU STATED ABOVE THAT THE FAILURE OF THE BATCH**
18		**PROCESS TO INCLUDE METRICS IS A PROBLEM. PLEASE EXPLAIN.**
19	A.	Verizon has proposed a process with some basic parameters, such as the maximum
20		holding period of seven weeks discussed above. But this parameter is essentially
21		meaningless, because Verizon suffers no adverse consequence for violating it. In short,
22		Verizon has made no commitment whatsoever on provisioning interval, and the CLECs
23		do not know what they would get if they agreed to use the Batch process. No commercial
24		entity can do business in reliance on a promise that can be broken at will and without

---

[42] TRO, ¶ 478.

1		consequence, especially when the promise is made by the commercial entity's major
2		competitor.
3	Q.	**TO WHAT EXTENT DOES THE BATCH PROCESS REFLECT OPERATIONAL**
4		**ENHANCEMENTS AND INCREASED EFFICIENCIES DESIRED BY CLECS?**
5	A.	Only to a very limited extent. The best thing that can be said about the proposed Batch
6		process is that it allows lines from more than one CLEC to be included in a single project.
7		The proposed process essentially ignores the main process enhancements that CLECs
8		have been recommending to Verizon in technical sessions in New York PSC Docket No.
9		02-C-1425. The process appears to have been developed by Verizon for its own purposes,
10		without incorporation of input from CLECs.
11	Q.	**WHY DO YOU SAY THAT THE PROCESS DOES NOT INCORPORATE INPUT**
12		**FROM CLECS?**
13	A.	CLECS have been saying what they want for months in the technical workshops in the
14		New York docket. While not the only item sought, one of the most important is the
15		*reduction of unnecessary manual work* and *increased automation* relating to the many
16		management, administrative and communication activities that take place both between
17		CLECs and Verizon and between or among the various Verizon workgroups as part of a
18		coordinated hot cut. (A cursory review of Verizon's cost study demonstrates the large
19		portion of its proposed hot cut charge that results from labor related to non-central office
20		wiring activities.)
21		CLECs want manual work activity reduced or eliminated through increased
22		automation. For example, CLECs have said that they want Verizon's Service Order
23		Processor to process their LSRs automatically and respond to CLECs through a dedicated
24		interface with information in an electronic format that can flow directly into CLEC
25		systems. This will eliminate the need for CLECs to dedicate personnel to access

PUBLIC VERSION

1   Verizon's WPTS system, refresh the screen continuously for updates, and manually

2   update its internal systems.[43] CLECs have asked Verizon to eliminate unnecessary

3   designed fall-out, which requires Verizon to devote manual effort to create internal

4   service orders (for which Verizon proposes to charge) that can be handled

5   automatically.[44] A constant theme of CLEC requests has been the request to "push out"

6   information electronically to CLECs at each stage of the process so that CLECs can

7   assume the responsibility (and manual effort, if necessary, instead of Verizon) for

8   ensuring that the orders in Verizon's systems are correctly populated and flowing through

9   to completion as contemplated.[45] CLECs have noted the costs and potential for delays or

10   errors associated with Verizon's use of manual processes in the RCCC for assigning

11   work and have proposed the implementation of automated systems to perform those

12   tasks.[46] CLECs have noted the importance to all workgroups at both Verizon and the

13   CLECs to know when order statuses change and the resulting need of a WPTS-type

14   system to allow both Verizon workgroups and CLECs the ability to enter status changes

15   and receive status change notifications automatically.[47] Currently, CLECs are unable to

16   enter status change notifications into the system nor do they receive status change

17   notifications from Verizon. CLECs have asked for the coordination of due date activities

18   to be handled electronically using WPTS[48] -- not for their elimination, as proposed by

19   Verizon in the Batch process (as we have stated, some involvement by CLECs in due

20   date activities is necessary to reduce service disruptions for CLEC customers).

---

[43]   AT&T and Broadview Panel Testimony, filed October 24, 2003 in New York PSC Docket No. 02-C-1425, at 49-50.
[44]   *Id*., at 50.
[45]   *Id*., at 52, 55.
[46]   *Id*., at 53.
[47]   *Id*, at 54-55.

1		We mention only some of our recommendations here to illustrate the disregard of
2		CLEC needs in Verizon's proposed Batch process. In fact, we do not want the Batch
3		process. We want the Project Process (and the Basic Process where appropriate) with the
4		automation described above (and other recommendations that we have made).
5	**Q.**	**VERIZON CLAIMS THAT ITS PROPOSED PROCESSES SATISFY THE TRO**
6		**REQUIREMENTS. DO YOU BELIEVE THAT VERIZON'S PROCESSES CAN**
7		**SATISFY THE TRO REQUIREMENTS WITHOUT IMPLEMENTING THE**
8		**ENHANCEMENTS THAT YOU RECOMMEND?**
9	A.	No. The TRO directs state commissions "within nine months of the effective date of this
10		Order, to approve and implement a batch cut migration process — a seamless, low-cost
11		process for transferring large volumes of mass market customers."[49] While it is doubtful
12		that in the real world any process that depends upon manual re-wiring of every line for
13		every change of carrier can be either low-cost or seamless, without the process
14		enhancements that we recommend to automate as much of the process as possible, it is
15		certain that neither the goal of "seamless" nor the goal of "low-cost" can be realized.
16		Elsewhere in this testimony and in the testimony of Mr. Salvatore, the failure of Verizon
17		to propose a low-cost process is addressed. Here, we emphasize that the only way that a
18		process that is inherently manual at the MDF can even begin to approach "seamless" (and
19		we doubt that the central office wiring requirements will ever permit the process to be
20		seamless in the way competitive markets require, such as the long distance market) is to
21		***automate every aspect of the process that can be automated.*** Our proposal attempts to
22		do that. The omission from Verizon's proposed hot cut processes of virtually every
23		automation enhancement that CLECs have recommended makes these processes
24		hopelessly susceptible at virtually every stage to human error, confusion and delay.

---

[48] *Id.*, p. 57.

1		Verizon has simply not proposed a hot cut process that is seamless.
2		Finally, so that there is no misunderstanding, we reiterate that, while
3		implementation of the automation and all other recommendations that we have proposed
4		is a necessary condition for achieving a seamless and low-cost process, it is not a
5		sufficient condition. Real-world implementation and testing (using Verizon's customers
6		as subjects) are essential, and if – as we believe will be the case – real-world experience
7		demonstrates that our recommended process is not seamless or low-cost at high volumes
8		due to the inherent limitations of the manual central office wiring work, then no hot cut
9		process can be found to satisfy the TRO requirements, and other options must be pursued.
10		As the FCC stated in the TRO,

11
12
13

> [W]e decline to require ELP [Electronic Loop Provisioning] at this time,
> although we may reexamine AT&T's proposal if hot cut processes are not,
> in fact, sufficient to handle necessary volumes.[50]

14	**IV.**	**AT&T AND BROADVIEW HOT CUT COSTS**
15 16	**Q.**	**DID AT&T AND BROADVIEW CONDUCT HOT CUT COST STUDIES IN THIS CASE?**
17	A.	Yes. AT&T and Broadview have conducted Project and Basic hot cut cost studies (the
18		"Studies"). The AT&T and Broadview Recommended Project process is the basis upon
19		which the Project Hot Cut Study was conducted. The Basic Hot Cut Study assumes the
20		same general process as the Project process, except that the Project process is based on a
21		100- line order and the Basic Process is based on a single line order. The Project hot cut
22		study is included as Attachment B and the Basic hot cut study is included as Attachment
23		C.

---

49   TRO, ¶ 423.
50   TRO, ¶ 491.

1   A narrative that explains the general methodology and details of both Studies is

2   included as Attachment D. However, it should be noted that the narrative focuses

3   primarily on the Project hot cut study. Since the methodology, work steps, labor times,

4   labor rates, frequency of occurrence, assumptions, etc, are primarily the same in both

5   studies, details relating to the Project Study are applicable to the Basic Study as well.

6 **Q.** **WHAT ARE THE AT&T AND BROADVIEW RECOMMENDED PROJECT**
7   **HOT CUT RATES?**

8 A.   AT&T and Broadview have determined that the total forward-looking cost for Verizon to

9   perform a hot cut using the Recommended Project Hot Cut Process is $4.79 for the first

10   line and $4.57 for each additional line thereafter. The initial line cost of $4.79 is

11   comprised of a flat rate service order cost of $0.22 per order,[51] a provisioning cost of

12      $0.10 per line, and a central office ("CO") wiring cost of $4.47 per line. The additional

13   line cost of $4.57 is comprised of the provisioning and the CO wiring per line costs, but

14   excludes the service order cost because it is recovered on the first line.

15 **Q.** **WHAT BASIC HOT CUT RATES DO YOU RECOMMEND THAT THE**
16   **DEPARTMENT ADOPT?**

17 A.   AT&T and Broadview have determined that the total forward-looking cost for Verizon to

18   perform a basic hot cut is $11.44 for the first line and $6.01 for each additional line

19   thereafter. The initial line cost of $11.44 is comprised of a flat rate service order cost of

20      $0.22 per order, a provisioning cost of $5.27 per line and a central office ("CO") wiring

21   cost of $5.95 per line. The additional line cost of $6.01 is comprised of a provisioning

22   cost of $0.06 and a CO wiring per line cost of $5.95 (the service order cost is excluded

23   because it is recovered on the first line).

---

[51] The $0.22 charge applies per LSR. The LSR is referred to as a service ordering charge in the tariff. The LSR may include multiple loops/lines.

| 1 | Q. | **PLEASE OUTLINE HOW THE AT&T AND BROADVIEW PROJECT HOT CUT** |
| 2 | | **COST STUDY WAS DEVELOPED.** |

3   A.   The Study modeled the costs of the Recommended Project Hot Cut Process proposed by

4   AT&T and Broadview. The Recommended Project process assumes that as much as

5   possible of the service order creation and administrative work will be automated, and also

6   assumes the use of technology and systems currently deployed by Verizon and/or in

7   existence today. Using current and enhanced capabilities of Verizon's OSS, the only

8   instance in which orders will require manual intervention on the part of Verizon

9   personnel is when there is a system error, known as fallout.

10   The Project Study appropriately identifies only those one time, non-recurring

11   costs that are incurred by Verizon to complete a Project hot cut. The non-recurring

12   expenses are calculated by multiplying the percent of times (frequency) that manual work

13   is required by the labor time needed to complete each step of the process and by the

14   applicable labor rate, i.e., cost = frequency * labor time * labor rate. The cost incurred to

15   complete each step of the hot cut process is then summed and grossed up by a common

16   overhead factor ("COH") and gross revenue loading to yield the fully loaded cost. (See

17   Attachments B for Study details).

| 18 | Q. | **PLEASE EXPLAIN WHAT IS MEANT BY FREQUENCY AND HOW THE** |
| 19 | | **CONCEPT IS APPLIED IN THE STUDY.** |

20   A.   Frequency represents the probability that a particular function within the hot cut process

21   needs to be performed. Frequency must be determined for two basic types of functions.

22   The first is the frequency of times the Verizon OSSs cannot automatically perform a task

23   and manual intervention is required. This is known as systems fall out. For example, the

24   Project Hot Cut Study assumes that the system fallout rate during the service order

25   creation phase of the processes is 1%. This means that 99% of the time Verizon's OSSs

1		can automatically process a CLEC hot cut service request without manual intervention
2		and, conversely, 1% of the time Verizon personnel must manually intervene to create the
3		order. The basis for this fallout rate is discussed in more detail below and the
4		Attachment D Narrative accompanying the Studies.
5		The second type of function for which frequency must be determined is for
6		certain steps in the pre-wiring and wiring phases of the Project hot cut processes. For
7		example, certain of Verizon's remote central offices ("COs") are unstaffed. Therefore,
8		when a hot cut needs to be performed at unstaffed COs, a technician(s) must travel to
9		them in order to do the frame wiring and, therefore, incurs more labor time than if no
10		travel were required. AT&T and Broadview assumed, based on data from Verizon, that
11		the frequency of this event occurring is 16% and thus 16% of the time it will incur
12		additional travel expenses.[52] Again, the basis for this estimate is explained below and in
13		the Attachment D Narrative accompanying the Study.
14	Q.	**HOW WAS FREQUENCY DETERMINED IN THE STUDY?**
15	A.	Frequency of occurrence in the Study was determined in various ways. For the most part,
16		AT&T and Broadview used its direct experience with a specific work activity under
17		study to estimate frequency. For example, this was the case for the system fallout
18		determined for the Verizon service order creation phase of the Recommended Project Hot
19		Cut Process. AT&T and Broadview subject matter experts ("SMEs") determined that
20		conservatively, only 1% of service orders fall out. This is based on current experience
21		with the percentage of times that Project hot cut local service order requests ("LSRs")

---

[52] Derived from Verizon's response to RR-21, in Docket D.T.E. 01-20, dated January 17, 2002, which indicates that 16% of working lines in Massachusetts reside at un-staffed COs.

1	have received Firm Order Confirmations ("FOCs") back from Verizon within minutes.
2	In order to receive a FOC so quickly, the order must have flowed through.
3	In other instances, when AT&T and Broadview did not have direct experience
4	with a specific function or sufficient information to estimate the rate of frequency, the
5	Study assumes a 2% system fallout rate. This fallout rate was supported by the
6	Department's order first in 1996 in the *Consolidated Arbitrations* proceeding, and again
7	in July 2002 in D.T.E. 01-20. In that latter decision the Department state:

8	The Department's finding in <u>Consolidated Arbitrations</u> is clear: "We
9	therefore conclude that the two percent fallout rate offered by CLECs is
10	indicative of likely experience with the forward-looking technologies in
11	this industry." <u>Phase 4-L Order</u> at 16. The Department reached this
12	conclusion when Verizon's MLAC fallout rate was 15 percent. The rate at
13	which orders fall out has been reduced since then to ten percent, and
14	Verizon considers a fallout of four percent to be achievable (EXH. VZ-16,
15	at 8; Tr. 3, at 532). This trend strengthens confidence in the Department's
16	previous finding and indicates that technological improvements affecting
17	fallout are attainable.[53]
18	
19	This is also consistent with the FCC's findings, in the recent Virginia arbitration, "that
20	the two percent fallout rate used in the AT&T/WorldCom model is consistent with
21	TELRIC requirements."[54]
22	AT&T's and Broadview's experience has shown that the fallout rate for certain
23	hot cut work activities has already fallen below 2%. For those instances, we used the
24	actual fallout rate.
25	Finally, the frequency of occurrence for travel time to unstaffed COs was derived
26	from Verizon's response to DTE 01-20 RR-21.

---

[53] Department Order, D.T.E. 01-20, page 449.

[54] *See Petition of AT&T Communications of Virginia, Inc. Pursuant to Section 252(e)(5) of the Communications Act for Preemption of the Virginia Corporation Commission Regarding Interconnection Disputes with Verizon Virginia, Inc.*, Federal Communications Commission, CC Docket No. 00-215,

PUBLIC VERSION

1 **Q. HOW WERE THE LABOR TIMES DETERMINED IN THE STUDY?**

2 A. For those instances in which AT&T and Broadview determined that Verizon personnel

3 were needed to perform a certain task in the service order creation and work assignment

4 phases of the Recommended Project Hot Cut Process, the labor times were derived from

5 corresponding work activities in Verizon's final compliance filing submitted in

6 D.T.E. 01-20. The pre-wiring and wiring CO frame technician work time was

7 determined, for the most part, based on AT&T's and Broadview's current experience

8 with such work activities.

9 **Q. HOW WERE THE LABOR <u>RATES</u> DETERMINED IN THE STUDY?**

10 A. The labor rates were derived based on modifications made by Mr. Robert Flappan in his

11 Reply Testimony to Verizon's proposed labor rates. We have reviewed Mr. Flappan's

12 testimony and agree that the adjustments he made result in TELRIC-compliant labor rates

13 and, thus utilized them in our Studies.

14 **Q. HOW WERE CERTAIN ADMINISTRATIVE COSTS, INCLUDED BY VERIZON**
15 **IN ITS COST STUDIES AS NON-RECURRING, TREATED IN THE AT&T AND**
16 **BROADVIW PROJECT HOT CUT STUDY?**

17 A. Although treated by Verizon as non-recurring costs**,** certain administrative overhead

18 functions performed by the RCCC in allocating work assignments when the Verizon OSS

19 fails to do so automatically and when monitoring hot cut project status reports should

20 properly be considered recurring in nature and, therefore, not appropriately included in a

21 non-recurring study.

"Memorandum Opinion and Order" No. DA 03-2735 (rel. August 29, 2003) ("FCC Virginia Cost Arbitration Order"), ¶ 592.

PUBLIC VERSION

| 1 | Q. | PLEASE OUTLINE HOW THE AT&T AND BROADVIEW BASIC HOT CUT |
| 2 | | COST STUDY WAS DEVELOPED. |

3   A.   As explained earlier, the methodology, work steps, labor times, labor rates, frequency of

4   occurrence, assumptions, etc, are primarily the same for both the Project and Basic Hot

5   Cut Studies. As such, the Basic study was derived from the Project study by changing

6   the amount of lines assumed to be cut over from 100 (Project) to 1 (Basic). When the

7   project size is changed to 1, the model automatically recalculates the costs for Basic hot

8   cuts.

9   **A.   <u>Verizon's Hot Cut Studies</u>**

| 10 | Q. | PLEASE SUMMARIZE THE RESULTS OF YOUR REVIEW OF THE HOT CUT |
| 11 | | COST STUDIES THAT VERIZON FILED IN THE INSTANT PROCEEDING. |

12   A.   Verizon's hot cut cost studies are severely flawed and produce substantially inflated costs

13   that, if adopted, would act as an insurmountable barrier to facilities-based competition.

14   The bottom-line result of Verizon's studies alone, with hot cut rates that – as we show

15   below – produce a weighted average cost of over $72 per line for a CLEC using the batch

16   process and $90 per line for carriers using the Project process,[55] is sufficient to

17   demonstrate that Verizon's studies do not comport with efficient, forward-looking

18   TELRIC pricing principles.

19   In the TRO, the FCC clearly expected ILECs to develop and offer efficient hot cut

20   processes that, when priced in accord with TELRIC, would produce a non-recurring

21   charge that would be a fraction – a small fraction - of $72. Indeed, the TRO cited a

22   nationwide average rate of $51.00 as its basis for a nationwide finding of impairment in

23   the absence of unbundled switching, and it cited the existing New York rate of $35 as

---

[55]   See Attachment E to this testimony.

1   another example of an unacceptably high rate.[56] Obviously, a rate of $72 cannot satisfy

2   the FCC's "low-cost" standard, when $51.00 or $35 does not.

3   A forward-looking process should produce rates in the neighborhood of $5.00 per

4   hot cut, because that is the implication of the findings by the FCC's Wireline Carrier

5   Bureau that the AT&T/WorldCom method of estimating the non-recurring charge of a

6   hot cut is more appropriate than the Verizon method.[57] More recently, the Pennsylvania

7   PUC adopted a hot cut rate for Verizon of only $1.44 per loop.[58]

8   The evidence in this case supports similar results.

9   Verizon is obliged to design a forward-looking hot cut process, from the ground

10   up if necessary, that can produce TELRIC rates. Verizon has done nothing of the kind.

11   The Verizon cost studies produce absurdly high results in part because Verizon

12   did not design a process from the ground up. It simply costed out subtasks of its existing,

13   or slightly modified existing, processes. This is not TELRIC. In examining the method

14   by which Verizon tried to adjust the cost of existing processes to make them TELRIC, the

15   FCC's Wireline Carrier Bureau stated:

16   Furthermore, it is not evident that the "forward-looking adjustment
17   factors" proposed by Verizon are sufficient to bring the model within
18   TELRIC standards. To the contrary, the ground rules for these adjustments

---

[56]   TRO, ¶ 470.
[57]   *See* FCC Virginia Cost Arbitration Order, ¶ 567. The final hot cut rate resulting from the Virginia arbitration was $5.01. *See Petition of AT&T Communications of Virginia, Inc. Pursuant to Section 252(e)(5) of the Communications Act for Preemption of the Virginia Corporation Commission Regarding Interconnection Disputes with Verizon Virginia, Inc.*, Federal Communications Commission, CC Docket No. 00-215, "Memorandum Opinion and Order"No. DA 04-181, Appendix, page 24 (rel. January 29, 2004). Available at: http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-04-181A1.pdf.
[58]   The final Pennsylvania hot cut rate is contained in a tariff filed by Verizon on January 27, 2004, in accord with the PUC's order dated December 11, 2003. *See* Verizon Pennsylvania Inc.'s Tariff Pa. PUC No. 216, Section 3, Part C.1.a.. Available from Verizon at:
https://retailgateway.bdi.gte.com:1490/cyberdocs.asp?optState=PA
See generally Generic Investigation re Verizon Pennsylvania Inc.'s Unbundled Network Element Rates, Pennsylvania PUC Docket No. R-00016683, Final Opinion and Order at 72 (Nov. 13, 2003); *see also id.*, Tentative Order at 177-180 (Oct. 24, 2002).

PUBLIC VERSION

1		seemed to preclude such adjustments, focusing only on expected
2		improvements in performing a particular sub-task, not on ***the possibility of***
3		***entirely new procedures based on an alternative, more efficient,***
4		***currently available, technology***.[59]

5   In short, the bottom line results of the Verizon cost studies demonstrate that they do not

6   reflect a forward looking process that has been designed from the ground up.

7   Beyond the obvious implications of its bottom line results, Verizon's studies do

8   not comport with efficient, forward-looking TELRIC pricing principles for the following

9   reasons:

10   1)   Verizon's service order and provisioning processes are highly manual and do not
11   reflect the use of efficient, currently available OSS technology;

12   2)   The frequency of occurrence rates assumed by Verizon in various steps of its cost
13   study are unrealistically high and do not comport with AT&T's and Broadview's
14   experience or with prior Department rulings in this regard;

15   3)   The labor times used in Verizon's studies are inflated, not forward-looking, in
16   certain cases non-sensical and, for the most part, derived from flawed survey
17   results designed and self administered by Verizon. As such, the Department
18   should reject Verizon's labor times. DR. Matthew Mercurio on behalf of AT&T
19   and Broadview has filed separate Reply Testimony addressing Verizon's surveys;

20   4)   Verizon's forward-looking adjustment factors ("FLAFs"), applied by Verizon to
21   its work times, are unsupported and arbitrary;

22   5)   Verizon's labor rates are inflated and not TELRIC-compliant since they were
23   developed based on embedded accounting data. Mr. Robert Flappan has filed
24   separate Reply Testimony addressing this issue;

---

[59]   FCC Virginia Cost Arbitration Order, ¶ 567.

PUBLIC VERSION

1   6)   Verizon's inclusion of disconnection charges in its hot cut costs violates basic

2   costing principles, are inflated, for the most part not applicable and should be

3   broken out separately from hot cut costs and;

4   7)   Verizon's proposed IDLC Surcharge Study is flawed because it erroneously treats

5   recurring costs as nonrecurring and, therefore, should be rejected.

6   Because Verizon's hot cut cost studies are fatally flawed and produce egregiously

7 high hot cut rates that will stifle local facilities-based competition, we recommend that

8 the Department reject Verizon's studies. Instead the Department should adopt the AT&T

9 and Broadview Study, which comply with TELRIC costing principles.

10 **Q. PLEASE SUMMARIZE VERIZON'S HOT CUT COST STUDIES FILED AS**
11 **PART OF THE INSTANT PROCEEDING.**

12 A.   Verizon filed separate studies for its 2-wire and 4-wire Full Mechanized Coordinated

13 ("Basic") hot cut process, its Large Job ("Project") hot cut process and its newly

14 proposed Batch hot cut process. Verizon also filed studies for its Full-Mechanized

15 Coordinated Expedite and Integrated Digital Loop Carrier ("IDLC") surcharges.

16   **B.   Analysis of Verizon's Proposed Hot Cut Costs**

17 **Q. PLEASE SUMMARIZE VERIZON'S PROPOSED COSTS FOR EACH OF ITS**
18 **HOT CUT PROCESSES.**

19 A.   The following Table 1, entitled Verizon Hot Cut Cost Estimates, shows Verizon's cost

20 estimates for each of its three hot cut processes, i.e., Basic (including 2-wire and 4-wire),

21 Project and Batch, broken out separately by initial and additional line costs.

Table 1

Verizon Hot Cut Cost Estimates

Description	Basic 2-wire		Basic 4-wire		Project		Batch	
Line	initial	add'l	initial	add'l	initial	add'l	initial	add'l
Service Order	$20.53		$27.43		$35.58		$21.68	
C O Wiring	$37.37	$21.30	$63.34	$36.82	$36.40	$32.28	$27.04	$27.04
Provisioning	$15.88	$15.93	$16.63	$16.68	$7.07	$7.12	$6.68	$6.73
Total Cost	**$73.78**	**$37.23**	**$107.40**	**$53.50**	**$79.05**	**$39.40**	**$55.40**	**$33.77**
Rolling UNE-P[60] NRC							$1.12	$0.86
Rolling UNE-P[61] MRC							$8.50	$8.50
Total w/Rolling UNE-P							**$65.02**	**$43.13**
IDLC Surcharge	$105.13	$105.13						
Total w/IDLC	**$178.91**	**$142.36**						

3
4 Source: Verizon Supplemental Initial Testimony, Non-Recurring Costs Summary,
5   Exhibit SUPP-V, December 17, 2003.

6   A few things should be noted about Table 1 for ease of understanding. Table 1

7 presents Verizon's estimates for service order, CO wiring and provisioning costs. These

8 categories comport with Verizon's current hot cut tariff rate structure design.

9   Service order charges are assessed for each CLEC local service request included

10 in a Project or Batch process, which are comprised of many LSRs and purportedly

11 represent the costs incurred by Verizon to create an internal service order for the cutover

12 of all the customer's loops on the LSR. Service order charges are a flat rate charge that

---

[60] The recurring UNE-P migration charge for the initial line is $1.12, which includes a service order charge of $0.21 and a provisioning charge of $0.91. The additional line charge of $0.86 is for the provisioning charge only. See Verizon's response to AT&T-VZ 3-152.

[61] We assumed a UNE-P rate of $18.69 per line (See Verizon Massachusetts' Motion to Reopen the Record in Docket D.T.E. 01-20, dated August 18, 2003, pages 2 to 3. The prorated monthly recurring charge ("MRC") assumes that the customer will be on rolling UNE-P for an average of 10 business days and that there are 22 business days in a month. Therefore, $8.50= $18.69 (UNE-P rate per line) x 10/22(business days)

1   applies per service order irrespective of the number of loops to be cutover as part of the

2   service order.

3   Unlike service order costs, CO wiring and provisioning costs were developed on a

4   per loop basis. The CO wiring costs purportedly recover the cost for Verizon's CO

5   technicians to pre-wire and wire the loops at the CO frame. Provisioning costs

6   purportedly recover the costs to administer and coordinate the cutover activities.

7   Table 1 also breaks out line costs by initial and additional (abbreviated "add'l" in

8   Table 1) for each of the three processes to reflect Verizon's proposed cost structure.

9   Since service order charges are assessed at the same flat rate whether the order contains

10   one or multiple lines, it is shown as part of the initial line cost.

11   Batch hot cut costs consist of two general categories of costs, i.e., service order,

12   CO wiring and provisioning costs, which are common to all hot cuts, and rolling UNE-P

13   non-recurring and recurring costs.

14   That bottom line is as follows. If a customer is already being served on UNE-P,

15   and a Batch hot cut is requested for that customer, the rolling UNE-P costs do not apply

16   and the hot cut cost would be $55.40/$33.77 (initial and additional line respectively).

17   Under the same circumstances, a Project hot cut would cost $79.05/$39.40 (initial and

18   additional respectively). After conversion of the existing embedded base of UNE-P

19   customers, when rolling UNE-P must be ordered to utilize the Batch hot cut for a new

20   customer, the costs of a Batch hot cut will be on average $65.02/$43.13 (initial and

21   additional line respectively). Finally, if a hot cut is requested for a customer currently

22   served on an IDLC loop, the IDLC surcharge of $105.13 (initial and additional line)

23   applies to the Basic service order, CO wiring and provisioning costs which produces a

1		total cost of \$178.91/\$142.36 (initial and additional line respectively). IDLC hot cuts are
2		always handled by Verizon using the Basic hot cut process.
3	**Q.**	**YOU HAVE STATED SEPARATELY THE RATES OF "INITIAL LINE" AND**
4		**"ADDITIONAL LINE." IN THE CASE OF THE BASIC, PROJECT AND**
5		**BATCH HOT CUT PROCESSES, HOW DOES VERIZON PROPOSE TO APPLY**
6		**THOSE RATES?**
7	A.	In considering the Basic, Project, and the Batch processes, one would think that the rate
8		for the additional line applies to all lines after the first one included in either the Basic,
9		Project or Batch process. However, that is not the case. The rate for the initial line
10		applies to the first line on an LSR for a single customer order and the rate for the
11		additional line applies for the remaining lines only on that same customer-specific LSR.
12		This means, for example, if a CLEC were to submit 100 lines for inclusion in a Batch cut,
13		but each line was for a different customer, the rate would not be \$55.40 for the first line
14		and \$33.77 for the other 99; instead, it would be \$55.40 for each and every line (and this
15		assumes that none of the 100 lines happen to be on IDLC). This is critical to understand,
16		because the ratio of customers to lines (or LSRs to loops) for the average residential
17		customer is nearly 1.1.
18	**Q.**	**ARE THE ROLLING UNE-P RATES ASSOCIATED WITH THE BATCH**
19		**PROCESS GUARANTEED?**
20	A.	No, as is clear from Verizon's Initial Panel Testimony on hot cuts. Although Verizon
21		claims that its rates for its rolling UNE-P or "UNE-P like" service will initially mirror its
22		current UNE-P migration nonrecurring rates, it will not commit to a period of time in
23		which this mirroring will be maintained and reserves the right to change the rates at any

1		time.[62] Therefore, Verizon's rolling UNE-P rates associated with Batch hot cuts for new

1   time.[62] Therefore, Verizon's rolling UNE-P rates associated with Batch hot cuts for new

2   customers are not guaranteed and can change at any time.

3   **Q.   PLEASE PROVIDE THE HISTORICAL BACKGROUND FOR VERIZON'S**
4   **BASIC HOT CUT RATES.**

5   A.   Verizon proposes two options for Basic hot cuts. One in which the CLEC does not

6   utilize WPTS ("non-WPTS Option 1") and one in which it does ("WPTS Option II").

7   Verizon's non-WPTS rates were approved as part of its Compliance Filing in Department

8   Order 01-20. The final version of Verizon's 01-20 NRC compliance filing was submitted

9   to the Department on July 2, 2003.

10   Verizon had filed its WPTS Option II rates in its Supplemental Compliance Filing

11   of February 27, 2003, in response to the Department's UNE Order of July 11, 2002,

12   which directed Verizon to "develop a less costly alternative for CLECs that Verizon MA

13   would offer as an alternative to the hot cut process modeled in Verizon's NRMC."

14   However, the Department carved out and did not allow Verizon's WPTS rates to go into

15   effect as part of its 01-20 Compliance Filing and instead, deferred consideration of the

16   proposed WPTS rates to this investigation under the TRO.[63]

17   **Q.   WHAT BASIC WPTS RATES DID VERIZON PROPOSE AS PART OF THIS**
18   **PROCEEDING?**

19   A.   The answer to that question is not as straightforward as one might think. In its Initial

20   Panel Testimony of November 14, 2003, Exhibit III-A, Verizon did not propose rates for

21   its WPTS 2-wire and 4-wire Basic hot cut processes[64]. It stated in footnote 5 to that same

---

[62]   Verizon's Initial Panel Testimony on Hot Cuts, ("IPT"), p. 35, lines 2 to 4.
[63]   *See* Docket 01-20, Letter Order on Verizon Massachusetts' Revised Compliance Filing, dated July 14, 2003, at 6-7. In a procedural memorandum dated November 24, 2003, the Department confirmed that it "will also investigate Verizon's proposed WPTS process" in this Docket 03-60.
[64]   IPT, Exhibit III-A, "Verizon Massachusetts Wholesale Non-Recurring Cost Model, Non-Recurring Cost Summary," p. 2 of 35.

1	exhibit that "Two and Four Wire Basic Hot Cuts (and Expedite) are not at issue in this
2	proceeding but are an integral part of the cost model." In response, in a procedural
3	memorandum issued in this docket on November 24, 2003, the Department clarified that
4	"In the Hot Cut phase of this proceeding, the Department will also investigate Verizon's
5	proposed WPTS process," and it ordered Verizon to file by December 17, 2003, a full
6	WPTS-based proposal, including testimony with "a detailed description of the WPTS
7	process, rates with supporting cost studies, and tariff provisions for rates, terms and
8	conditions."
9	Verizon therefore filed Supplemental Initial Panel Testimony (WPTS Process), on
10	December 17, 2003. When it did so, it proposed the Basic 2-wire and 4-wire rates shown
11	in Table 1 above.[65] However, further confusing the matter, in response to ATT-VZ 2-49,
12	Verizon provided an electronic copy of its hot cut cost studies that contains the same
13	footnote as its Initial Panel Testimony, Exhibit III-A, asserting that Basic hot cut rates are
14	not part of this proceeding.[66] AT&T will proceed under the assumption that Verizon's
15	Basic hot cut rates presented in its Supplemental Initial Panel Testimony, dated
16	December 17, Exhibit SUPP-V, are the Basic WPTS rates that it is proposing in this
17	proceeding.

18 **Q. HAS VERIZON COMPLIED WITH THE DEPARTMENT'S DIRECTIVE IN ITS**
19 **UNE ORDER TO DEVELOP "LESS COSTLY" BASIC HOT CUT RATES?**

20 A. No. Table 2 below compares Verizons 2-wire and 4-wire Basic non-WPTS and WPTS

21 hot cut rates filed in its May 29, 2003 Compliance Filing to those proposed in the instant

22 proceeding.

---

[65] Supplemental Initial Panel Testimony Of Verizon Massachusetts (WPTS Process), dated December 17, 2003, page 11, and Exhibit SUPP-V to that same testimony.

Basic Process	Non-WPTS (Option I) 7/2/03 Compliance Filing		WPTS (Option II) 7/2/03 Compliance Filing		WPTS (Option II) in 12/17/03 Filing	
	initial	add'l	initial	add'l	initial	add'l
2-wire	$87.81	$65.12	$42.65	$31.98	$73.78	$37.23
4-wire	$96.19	$82.24	$45.64	$35.70	$107.40	$53.50

1 **Table 2**

2 **Comparison of Verizon's Basic Non-WPTS and WPTS Rates**

3

4   As shown in Table 2 above, Verizon's Basic WPTS 2-wire and 4-wire hot cut

5   rates proposed in the instant proceeding are substantially higher than comparable rates

6   filed in its Compliance Filing of July 2, 2003. Moreover, its WPTS 4-wire initial line

7   rate proposed in the instant proceeding is higher than its non-WPTS 4-wire rate. Its clear

8   that Verizon is back-sliding on the Department's directive to offer "less costly" WPTS

9   Basic rates in the instant proceeding.

10 **Q.** **PLEASE COMMENT ON THE RELATIVE RELATIONSHIP BETWEEN**
11   **VERIZON'S PROPOSED BASIC AND PROJECT HOT CUT RATES.**

12 A. Comparing Verizon's proposed rates for its Project and Basic processes presented in

13   Table 1, without consideration of the IDLC surcharge, shows that it costs more for a

14   Project hot cut than for a Basic hot cut. This means that if CLECs ordered hot cuts on a

15   Project, i.e., bulk basis, it would cost them more per hot cut than if they request a Basic

16   hot cut on a one-at-a–time basis. ***This result defies logic***. In any wholesale commercial

17   relationship, it is logical to expect to pay less on a unit basis when buying in quantity

18   rather than small amounts. It would be analogous to Wal-Mart's paying its vendors more

19   per can when purchasing cases of canned corn rather than individual cans.

20   Of the three processes, Verizon's Batch hot cut rates are the lowest. However, as

21   explained in Section III of this testimony, AT&T and Broadview believe that the

---

[66] Verizon response to AT&T 2-49, Verizon Massachusetts Wholesale Non-Recurring Cost Model, Non-Recurring Cost Summary, Attachment 2-49, footnote 6.

1   operational drawbacks inherent in Verizon's Batch proposal out weigh its cost advantage

2   relative to the other processes and do not wish to utilize it for ordering hot cuts. As such,

3   Verizon's proposed hot cut choices leave AT&T and Broadview, and presumably other

4   CLECs as well, in an untenable position. They can use the Basic process and pay lower

5   hot cut charges to Verizon, but incur higher internal costs due to the inefficient ordering

6   and processing of one LSR at a time, or they can use the Project process and pay higher

7   hot cut charges to Verizon, but incur lower internal costs as a result of internal scale

8   economies. Verizon's rates for its processes must be rationalized to allow CLECs to pay

9   a Project rate that reflects the inherent scale economies relative to the low volume Basic

10   process. It makes no sense for CLECs to order under the Basic process the same number

11   of lines as would qualify for a Project and pay less simply because the orders are placed

12   individually.

13   **Q.   WILL VERIZON'S PROPOSED HOT CUT COSTS PROMOTE FACILITIES-**
14   **BASED COMPETITION?**

15   A.   Absolutely not. Verizon's proposed hot cut processes are designed to maximize

16   inefficiencies and escalate costs in a deliberate effort to insure that exorbitant rates

17   foreclose competition and stifle CLECs' ability to serve the local market on a facilities-

18   basis, i.e., employing their own switches in conjunction with Verizon's unbundled loops

19   ("UNE-L"). Not only would Verizon's proposed hot cut rates not support widespread

20   facilities-based competition at the mass market level, the rates would not even permit the

21   existing limited level of UNE-L based competition to continue.

22   Hot cut charges are non-recurring, which means that they are paid up front, all at

23   once, at the time the customer is acquired. In addition to these up-front, non-recurring

24   charges, facilities-based CLECs would pay Verizon monthly recurring charges for loop

| 1 | facilities, collocation (e.g., power, space, cross-connection, etc.) and special access |

| 2 | facility recurring charges to transport their traffic to/from their collocated cages and |

| 3 | switches. Moreover, CLECs incur their own retail costs, such as marketing, advertising, |

| 4 | billing, etc., and their own network and switching costs. |

5 **Q.** **IF VERIZON'S PROPOSED HOT CUT RATES WERE ADOPTED, WHAT**
6 **WOULD IT COST CLECS TO CONVERT THEIR EXISTING BASE OF UNE-P**
7 **CUSTOMERS TO UNE-L AND WHAT WOULD BE THEIR ONGOING HOT**
8 **CUT COSTS TO PROVIDE FACILITIES-BASED LOCAL SERVICE?**

9 A. Based on Verizon's own assumptions, if the Department adopted Verizon's proposed hot

10 cut costs, CLECs would have to pay Verizon between $99 and $123 million (Batch and

11 Project processes respectively) over a 27-month period in which the existing base of

12 UNE-P customers is converted to UNE-L. On a going forward basis, after the embedded

13 base of customers has been migrated, it would cost CLECs between $37 and $46 million

14 annually (Batch and Project processes respectively). Over a ten-year period, again based

15 on Verizon's assumptions, CLECs would have to pay Verizon between $383 and $478

16 million in hot cut charges.

17 These estimates are calculated from Verizon's proposed hot cut costs and

18 Verizon's estimates of the number of hot cuts that will be required to convert the existing

19 embedded base of UNE-P customers to UNE-L and its estimate of the number of on-

20 going hot cuts after the embedded base is fully migrated. (See Attachment E for details.)

21 They reflect the percentage of IDLC lines in Verizon's network and the average number

22 of lines on an LSR. However, they do not reflect the fact that the same IDLC loop may

23 be migrated and the substantial associated cost incurred by various CLECs multiple

24 times, due to Verizon constantly swapping a CLEC customer's IDLC loop with an

25 existing Verizon retail customer's facility. Thus, the same IDLC loop could make the

1		rounds to a significant number of Verizon retail customers, with CLECs paying an
2		exorbitant migration fee each time.
3	**Q.**	**PLEASE EXPLAIN HOW THE COST ESTIMATES TO CONVERT THE**
4		**EXISTING BASE OF UNE-P CUSTOMERS AND ON-GOING HOT CUT COSTS**
5		**WAS DERIVED.**
6	A.	CLECs pay uniform charges under the current customer migration system for UNE-P.
7		This is not true, however, for Verizon's various hot cut pricing proposals. To the
8		contrary, Verizon proposes a series of different prices for first lines, additional lines and
9		different kinds of lines – most notably IDLC lines - that also require a field dispatch. To
10		calculate the cost to CLECs of converting their embedded customer base, primarily
11		served today using UNE-P, and their going forward hot cut costs at Verizon's proposed
12		rates, it is necessary to calculate a weighted average unit hot cut rate for Verizon's
13		Project and Batch processes respectively (Attachment E, lines 28 and 29 respectively)
14		based on Verizon's proposed hot cut rates as presented in Table 1. This, therefore,
15		properly captures Verizon's estimated actual costs to itself, and the proposed prices to be
16		paid by CLECs to compensate Verizon for using the inefficient method it has proposed to
17		convert the CLECs' full customer base and to continue to serve the mass market on a
18		going forward basis.
19		The weightings for initial and additional lines were developed in Attachment E,
20		based on the number of lines per CLEC LSRs for residence and business customers
21		(Attachment E, line 30). In addition, the weightings for non-IDLC and IDLC loops were
22		based on Verizon's estimate of the number of IDLC loops to total Verizon loops in the
23		state (Attachment E, lines 2 and 3).
24		The weighted average unit hot cut rates for Verizon's Project and Batch processes
25		were then multiplied by Verizon's estimate of the number of hot cuts necessary to

1		convert the embedded base of UNE-P customers to UNE-L over a 27 month period
2		(Attachment E, line 33) and its estimates of on-going hot cuts which will occur both
3		during and after the embedded base is fully migrated (Attachment E, line 31).
4		**C.** <u>**Implications of Verizon's Costing Method and Results**</u>

5   **Q.**   **DOES IT MAKE ECONOMIC SENSE TO PERFORM HOT CUTS IN SUCH**
6   **QUANTITIES AT SUCH COSTS?**

7   A.   No, not under any circumstances. First, and most obviously, this staggering amount of

8   up-front, one-time charges will create an insurmountable economic barrier to the

9   continuation of the competition that exists today based on UNE-P. As is explained in

10   detail in the testimony of Mr. Salvatore, submitted with this testimony, no UNE-P carrier

11   could afford to pay, with no opportunity to recover, in excess of $100 million in one time

12   hot cut costs simply to be able to continue to serve its existing customer base and,

13   therefore, no carrier could support the establishment of facilities-based competition.

14   Second, Verizon's cost calculations simply makes the case for developing and

15   implementing a true electronic loop provisioning methodology. Verizon's own cost

16   analysis suggests that it is prepared to expend between $383 and $478 million dollars

17   over ten years (which it expects to recover from its competitors) by employing manual

18   processes that never improve and are never adequate. If these are the costs of manual

19   provisioning, then electronic provisioning is an absolute necessity, not only because of its

20   efficiency but because it is both in the short term and in the long term, less costly.

21   **Q.**   **IS THERE AN OVERARCHING FLAW IN VERIZON'S APPROACH TO**
22   **DEVELOPING HOT CUT COSTS?**

23   Yes, there is. Verizon has designed its hot cut processes to insure their commercial

24   failure. No further proof of this is needed than the fact that Verizon proposes to incur

25   costs during a 27-month UNE-P to UNE-L transition period, and impose those costs on

1	CLECs, of $100 million merely to give CLECs the opportunity to continue serving their
2	existing customers, while seeking to acquire new customers. With estimated forward
3	looking costs of $37 to $46 million annually, any competent firm that responds to
4	economically rational incentives would have been exploring every possible avenue to
5	automate its processes.

6 **Q.**   **WHAT ARE THE IMPLICATIONS OF A VERIZON PROPOSAL TO IMPOSE**
7   **SUCH EXTRAORDINARY COSTS ON ITS COMPETITORS THROUGH THE**
8   **USE OF OUTDATED, INEFFICIENT MANUAL PROCESSES?**

9 **A.**   Clearly Verizon has no incentive to propose an efficient, forward-looking process

10   because – at least under its view – it can impose the costs and burdens of an inefficient

11   process on its competitors. Only if there were consequences to Verizon, i.e., benefits or

12   avoidance of costs, that result from its proposed hot cut processes and costs would it

13   make economic sense for Verizon to develop an economically rational approach.

14 **Q.**   **BUT ISN'T IT THE CLECS WHO REQUIRE A HOT CUT PROCESS, SO ISN'T**
15   **IT THE CLECS WHO SHOULD PAY THE COSTS OF SUCH A PROCESS?**

16 **A.**   No! Certainly not with respect to the embedded base of CLEC customers currently being

17   served on UNE-P. Verizon's approach to hot cut costs does not reflect proper principles

18   of cost causation. In the ordinary instance, the cost causer is the party requesting service.

19   In this instance, however, CLECs are already serving hundreds of thousands of customers

20   on a UNE-P basis at rates that this Department has found allow Verizon to recover its

21   forward looking costs, including the cost of capital, plus a recovery of forward looking

22   common costs. These customers are currently being served on an efficient, cost

23   compensating basis, and CLECs have not asked Verizon to convert those customers to

24   UNE-L. If the Department were to find that Verizon were no longer required to provide

25   UNE-P and if Verizon were then to demand that CLECs convert their existing customers

1		to UNE-L, then it would be Verizon, not the CLECs, who is the cost-causer. Because
2		Verizon would be free to continue to provide unbundled switching to CLECs, so that in
3		the absence of a CLEC request to convert a UNE-P customer to UNE-L, it would be
4		Verizon that is instigating the change and causing the costs. None of the hot cut costs of
5		converting the embedded base should be recoverable from CLECs under proper
6		principles of cost causation.
7	Q.	**WHAT CAN VERIZON DO TO REMEDY ITS INEFFICIENT AND**
8		**PROHBITVLEY EXPENSIVE HOT CUT PROCESSES?**
9		As explained earlier, the most serious flaw in Verizon's cost studies is the assumption of
10		its inherently manual, outdated and inefficient processes to perform hot cuts.
11		Most obviously, many of the processes that Verizon has treated as manual can be
12		automated and streamlined for a small fraction of the costs Verizon intends to charge for
13		its highly manual processes.
14		However, at a more fundamental level, rapid changes in telecommunications
15		technology makes it virtually certain that the entire customer loop process can be
16		converted from manual to electronic, with enormous beneficial consequences not only for
17		consumers and CLECs, but for Verizon itself.
18	Q.	**ARE YOU ASSERTING THAT THIS DEPARTMENT SHOULD COMPEL**
19		**VERIZON TO IMPLEMENT ELECTRONIC LOOP PROVISIONING?**
20		Electronic loop provisioning is not one idea or one technology and, with the movement of
21		this industry towards an Internet Protocol ("IP") architecture, automated methods for
22		migrating access to customer loops are becoming increasingly accessible. What
23		Verizon's testimony shows is that manual loop provisioning is simply not commercially
24		feasible – not at the costs Verizon claims it would actually incur. The FCC was explicit
25		in finding that, if the facts arising from state investigations of hot cut processes should

1		prove that there is no "seamless, low cost" method for converting customer loops using
2		current technology, it will be time to reconsider electronic alternatives.[67] Verizon's cost
3		analysis provides a textbook case for undertaking such an investigation.
4	**Q.**	**ARE THERE MORE MICRO-LEVEL FLAWS IN VERIZON'S ANALYSIS?**
5		Yes, many, and they are discussed below.
6		**D.** **Analysis of Verizon's Hot Cut Cost Studies ond Recommended Remedies**
7		1. **Verizon's Hot Cut Rates Are Not TELRIC-Compliant.**
8 9	**Q.**	**DO VERIZON'S HOT CUT STUDIES COMPLY WITH EFFICIENT, FORWARD LOOKING TELRIC COSTING PRINCIPLES?**
10	A.	Absolutely not. In order to comply with TELRIC principles, nonrecurring hot cut studies
11		should employ efficient and forward looking costing principles established by this
12		Department and the FCC. The studies should reflect, to the most practical degree
13		possible, hot cut processes that minimize costly human intervention through the use of
14		fully automated and integrated OSSs and that eliminate unnecessary work activities and
15		establish efficient work practices.
16		Rather, Verizon's basic methodology is to take its existing network design – a
17		design that features a proprietary analog network and whose OSSs are insufficiently
18		integrated to accommodate a multi-carrier environment – and simply apply a randomly
19		chosen "forward-looking adjustments factor" ("FLAF") to current work times and
20		occurrences as a means of estimating future, unspecified efficiencies. The methodology
21		is entirely inadequate and thereby grossly underestimates the differences in efficiency
22		gains between tinkering with a network design never meant to accommodate a multiple
23		carrier environment and designing one for such purposes.

---

[67]   TRO, ¶ 491.

1   Verizon's non-recurring cost studies include numerous tasks, labor times and

2   assumptions that are inconsistent with efficient, forward-looking TELRIC principles.

3   Labor times should be determined in an objective manner that reflects efficient work

4   activities and labor rates should include forward-looking productivity increases and

5   loadings.

6   In addition, hot cut charges should include only non-recurring charges and

7   exclude recurring costs such as those associated with constructing or maintaining the

8   network. Verizon's hot cut cost studies inappropriately include fieldwork and other

9   activities that Verizon should have reflected and, in many cases, probably has included in

10   current recurring charges.

11   Finally, Verizon's proposed charges violate the principle of cost causation

12   because it has bundled disconnection costs into its hot cut charges. CLECs cause Verizon

13   to incur disconnection costs, not at the time it requests a hot cut, but some period of time

14   thereafter, probably when it loses the customer to another carrier and, therefore, wishes to

15   terminate the UNE-L service. Verizon's connection and disconnection charges should be

16   bifurcated and paid at the time the CLEC causes Verizon to incur either the connection or

17   disconnection cost.

18   For all of these reasons and more, Verizon's hot cut cost studies do not comply

19   with this Department's previously established pricing principles. The Department should

20   require Verizon to set prices based on the costs that an efficient incumbent, operating in a

21   competitive environment and using the most efficient technology available today, would

22   incur. The cost studies that Verizon has submitted in this docket are based on its current

1		highly manual processes with only superficial and inadequate attempts to adopt forward
2		looking technology and efficient work practices and, therefore, should be rejected.
3	**Q.**	**PLEASE DESCRIBE THE COST STUDY METHODOLOGY EMPLOYED BY**
4		**VERIZON FOR ITS BASIC, PROJECT AND BATCH PROCESSES.**
5	A.	The methodology employed and the structure of Verizon's cost studies for its proposed
6		Basic, Project and Batch processes and IDLC Surcharge are the same for all processes.
7		The studies are broken out by the five work centers involved in performing hot cuts, i.e.,
8		National Marketing Center ("NMC"), Regional CLEC Coordinating Center ("RCCC"),
9		Assignment Processing Center ("APC"), Recent Change Memory Administration Center
10		("RCMAC") and CO Frame. The work functions performed within each of the five work
11		centers are identified and costed in the same manner for the three hot cut processes.
12		First, baseline current labor times were identified, for the most part from
13		Verizon's self designed and self administered surveys, for each work function by
14		connection and disconnection activities within each work center and adjusted by
15		frequency of occurrence and forward-looking factors to purportedly yield a forward
16		looking labor time. The labor times for each work center were aggregated into service
17		order, CO wiring and provisioning labor times and multiplied by labor rates to yield
18		Verizon's unloaded hot cut costs. Service order costs are the costs associated with the
19		NMC work center. Provisioning costs include the RCCC, APC and RCMAC costs. The
20		CO wiring costs are the costs associated with the CO Frame.
21		Finally, the unloaded costs were grossed up by a common overhead ("COH") and
22		gross revenue loading ("GRL") factor to yield Verizon's fully loaded hot cut costs. This
23		methodology was repeated for initial and additional line costs for the Basic, Project and

1		Batch processes. The results of Verizon's hot cut cost studies are summarized in Table 1
2		above.
3	**Q.**	**PLEASE OUTLINE THE FUNCTIONS PERFORMED BY EACH OF**
4		**VERIZON'S WORK CENTERS IDENTIFIED IN ITS HOT CUT COST**
5		**STUDIES.**
6	A.	The NMC is responsible for the creation of Verizon's internal service orders. The CLEC

7   initiates a hot cut request by issuing an LSR electronically to Verizon's service order

8   processor, ("SOP") OSS. Verizon's OSS receives the LSR through its electronic

9   interface and converts that request into an internal service order that contains the

10   information needed to perform the requested hot cut. When the OSS cannot

11   automatically create the internal service order, a rejection or fallout, i.e., request for

12   manual assistance ("RMA"), is generated and it is delivered either to the NMC or CLEC

13   for resolution. The high degree of manual intervention claimed by Verizon for service

14   order creation demonstrates that this stage of the hot cut process is very costly and needs

15   to be automated in line with the current state of systems technology.

16   The APC is responsible for the inventory management of Verizon's network. As

17   such, it controls the assignment of facilities on a retail and wholesale basis. Similar to the

18   NMC, the APC responds to service order fallout when Verizon's OSSs cannot

19   automatically assign facilities for a hot cut request. Field technicians also interface with

20   the APC to correct situations in which the network inventory does not match the actual

21   plant. As we discuss below in greater detail, much of the work performed by the APC in

22   the hot cut process is necessitated by Verizon database errors or its inability to mange its

23   network inventory and, therefore, is not properly chargeable to CLECs.

24   The RCMAC is responsible for insuring that the switched network assignments

25   (maintained by the APC) are properly reflected in Verizon's Local Digital Switch

1   translations.   The RCMAC receives automated requests to manually intervene in order to

2   assist the OSS in delivering the translations to the switch.   As will be discussed below,

3   much of the work performed by the RCMAC is related to UNE-P disconnection activities

4   for which Verizon is attempting to double bill CLECs.

5   The RCCC is responsible for coordinating the activities of the other work groups.

6   Similar to other work groups, many of the activities performed by the RCCC can and

7   should be automated.

8   The CO Frame is responsible for the pre-wiring and final due date wiring work

9   necessary to connect the UNE loop to the CLECs switch.   Efficiency at the frame can be

10   enhanced through the use of hand held devices that can be used to electronically

11   communicate the status of hot cuts between itself, Verizon's RCCC and CLECs.

12   Finally, the Field Installation work group is responsible for the rearrangement of

13   outside plant facilities to swap copper and/or UDLC facilities for IDLC facilities when a

14   hot cut is requested for IDLC loops.   Also explained in greater detail below, the facilities

15   rearrangement activities engaged in by this work group are properly classified as

16   recurring maintenance costs and, therefore, should not be included as part of non-

17   recurring hot cut costs.

18 **Q.   PLEASE DESCRIBE HOW YOU WILL PROCEED IN YOUR REPLY**
19 **TESTIMONY TO ANALYZE, EVALUATE AND RECOMMEND NEEDED**
20 **ADJUSTMENTS TO VERIZON'S COST STUDIES FOR ITS BASIC, PROJECT**
21 **AND BATCH PROCESSES.**

22 A.   As explained above, since the methodology employed and the structure of Verizon's cost

23   studies for its Basic, Project and Batch processes are the same, we will provide general

24   comments that will apply to all three processes.   However, for the most part, we will

25   focus our discussion in the body of this testimony on Verizon's Project Hot Cut Cost

1		Study. These comments will apply to all three processes unless otherwise noted. In
2		addition, Attachment G, provided as part of this testimony, presents AT&T's and
3		Broadview's recommended adjusted connection labor times for each of the Verizon hot
4		cut studies for its Basic and Project processes, with comments explaining why and what
5		modifications are necessary. Similarly, Attachment G provides AT&T's and Broadview's
6		recommended adjustments for disconnection charges.

7 **Q.** **WHY ARE VERIZON'S SERVICE ORDER AND PROVISIONING**
8   **CONNECTION COSTS NOT TELRIC-COMPLIANT?**

9 A. Verizon's hot cut service order and administration connection costs exhibit a high degree

10   of manual work activities that reflect its current inadequate state of automation. For

11   example, according to Verizon, it takes **PROPRIETARY INFORMATION BEGINS**

12   XXXXXXXXXXXXXXX[68] **PROPRIETARY INFORMATION ENDS** minutes of

13   manual labor time to create a service order for one order in a Project hot cut. When

14   multiplied by Verizon's labor rates and loadings, the service order connect charge is

15   **PROPRIETARY INFORMTION BEGINS** XX **PROPRIETARY INFORMATION**

16   **ENDS** XXXXXXXXXXXXXXXXXXXXX **PROPRIETARY INFORMATION**

17   **BEGINS** XXXXX **PROPRIETARY INFORMATION ENDS**. [69]

18   In contrast, in its Compliance Filing of July 2, 2003, in Docket 01-20, Verizon's

19   proposed a service order charge for its non-WPTS and WPTS Basic 2-wire and 4-wire

20   hot cuts of $1.02 (initial line only). It is ludicrous for Verizon to propose service order

21   charges in the instant proceeding that are almost **PROPRIETARY INFORMATION**

22   **BEGINS** XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

23   XXXXXXXXXXXXXX **PROPRIETARY INFORMATION ENDS** that amount.

---

[68] IPT, Exhibit III-A, Large Job (Project) Hot Cut Initial, page 15 of 35, subtotal, line 8.

1   Electronic order processing does not necessarily eliminate all manual

2   intervention. But the cost of manual intervention should only be included in a non-

3   recurring cost study for hot cuts if either (1) even a forward-looking OSS designed to

4   process orders efficiently would require manual intervention in that particular

5   circumstance or (2) a CLEC error or request causes Verizon to incur costs for manual

6   intervention when, absent that CLEC error or request, Verizon could have processed the

7   order without such intervention. Therefore, one must ask, "Are there conditions that

8   prevent automatic electronic order creation, and if so, are these conditions the result of

9   CLEC- or Verizon-caused errors?" The answer to this question helps to establish cost

10   causation.

11   Verizon's hot cut service order costs are primarily the result of three manual work

12   activities:

13   1)   negotiations between the NMC and CO Frame to determine an order due date
14   (Project-initial, NMC-step 1),

15   2)   manual creation of service orders that fall out or are designed to fall out of the
16   service order system (Project-initial, NMC- step 4) and,

17   3)   cancel or modify the due date on the order, if necessary (Project-initial, NMC-step
18   6)[70].

19   These work activities should be fully automated. The root causes of service order

20   fallout should be examined and fixed. The CLEC should simply be able to submit the hot

21   cut LSR through the EDI system, as it does today, and Verizon's service order OSSs

22   should automatically determine the next available due date that the CO Frame could

---

[69] *Id.*, page 17 of 35, lines 7 & 10.
[70] *Id.*, NMC, page 15 of 35.

1   perform the hot cut and automatically send the information back to the CLEC. Since this

2   phase of service order creation should be totally automated and integrated with other

3   work center systems, only those labor times necessitated by manual intervention in a fully

4   mechanized service order process, should be charged to the CLEC as a non-recurring hot

5   cut charge.

6   Similarly, provisioning costs, which encompass the work activities of the RCCC,

7   APC and RCMAC, should be automated to the fullest extent possible. The coordination,

8   facilities assignment, translation changes, etc. work activities identified by Verizon

9   represent a high degree of manual work effort that is inconsistent with fully automated

10   and integrated OSS systems. Attachment G to this testimony presents for each

11   connection work activity those functions that can be eliminated or reduced through

12   systems automation.

13   **Q.   YOU MENTIONED ABOVE THAT VERIZON INCLUDED IN ITS NMC**
14   **SERVICE ORDER WORK ACTIVITIES A COST TO "CANCEL OR MODIFY**
15   **THE DUE DATE ON THE ORDER, IF NECESSARY", IS THIS COST BEING**
16   **DOUBLE RECOVERD?**

17   A.   Yes. Verizon already imposes a non-recurring charge of $6.62 for supplementing service

18   orders in its D.T.E. Massachusetts Tariff No. 17 through a "Service Date Change

19   Charge."[71] The terms and conditions in the tariff state with respect to this charge: When,

20   for any reason, the CLEC indicates that service cannot be accepted for a period not to

21   exceed 30 calendar days, and the Telephone Company accordingly delays the start of

22   service, a service date change will apply".[72]

23   The tariff "Service Date Change Charge" of $6.62 appears to recover the same

24   cost for the work activity included in Verizon's proposed NMC cost to "Cancel or

---

[71]   Verizon's Tariff D.T.E. Massachusetts No. 17, Part M, Section 1, page 18.

PUBLIC VERSION

1		Modify the Due Date on the Order, If Necessary" (Project-initial- NMC, step 6[73]). It is
2		obvious that Verizon should not be permitted to double bill for this work activity and,
3		therefore, one of the charges, preferably the tariff charge, should be eliminated.

4   2.   **Frequency of Occurrence**

5 **Q.** **PLEASE EXPLAIN HOW FREQUENCY OF OCCURRENCE IS USED BY**
6   **VERIZON TO DETERMINE LABOR TIMES.**

7 A. Frequency of occurrence represents the percentage of time or the probability that a given

8   task is expected to be performed. For example, if it is estimated that it takes 5 minutes to

9   perform a task, but the frequency of occurrence for the task is only 10%, then only .5

10   minutes (5 minutes to perform the task multiplied by a 10% frequency of occurrence) is

11   used as the labor time for that work activity. When frequency of occurrence pertains to

12   the percentage of times that a Verizon OSS cannot automatically perform a task and

13   manual intervention is required, it is called system fallout.

14 **Q.** **HAS THE DEPARTMENT RULED ON THE ISSUE OF FALLOUT IN A**
15   **PREVIOUS PROCEEDING?**

16 A. Yes. As explained earlier, the Department in D.T.E. 01-20, ruled that a 2% forward-

17   looking service order fallout rate was reasonable. As will be seen in what follows,

18   Verizon's proposed service order fallout rates are many times that amount. In its cost

19   Study and restatement of Verizon's hot cut cost studies, AT&T and Broadview used a 2%

20   fallout rate, unless its experience has shown that the fallout rate achieved currently is

21   lower than 2%.

---

[72]   Verizon's Tariff D.T.E. Massachusetts No. 17, Part A, Section 3.3.5B 1, page 14.
[73]   IPT, Exhibit III-A, Project-initial- NMC, step 6, page 15 of 35.

| 1 | Q. | **WHY ARE THE FREQUENCY OF OCCURRENCE ESTIMATES ASSUMED BY** |
| 2 | | **VERIZON FOR ITS NMC CONNECTION ACTIVITIES OVERSTATED?** |

3   A.   Verizon claims that CLEC orders fall out 23% of the time (Project Hot Cut Study-initial,

4   NMC, connection steps 2 and 4).[74] This is an egregious overstatement of hot cut service

5   order fallout. It is AT&T's and Broadview's recent experience with tens of thousands of

6   hot cut requests that service order fallout occurs less than 1% of the time. NMC service

7   order system fallout for all of its hot cut studies should be no greater than 1%.

8   Verizon estimates that its frequency of occurrence for the NMC's referring

9   assignment problems to the CLEC and APC is **PROPRIETARY INFORMTION**

10   **BEGINS** XXX **PROPRIETARY INFORMATION ENDS** (See Verizon's Project Hot

11   Cut Study-initial, NMC connection step 5).[75] In a forward-looking environment, OSSs,

12   such as those Verizon currently has in place today, should be capable of automatically

13   delivering assignment problems to CLECs and Verizon's various internal work groups.

14	Q.	**WHY ARE THE FREQUENCY OF OCCURRENCE ESTIMATES ASSUMED BY**
15		**VERIZON FOR HOT CUT PROVISIONING ASSOCIATED WITH ITS APC,**
16		**AND RCMAC WORK CENTER CONNECTION ACTIVITIES OVERSTATED?**

17   A.   Verizon estimates that the APC must assign outside plant facilities **PROPRIETARY**

18   **INFORMTION BEGINS** XX **PROPRIETARY INFROMNATION ENDS** of the

19   time. (See Verizon's Project Hot Cut Study-initial, connection, APC).[76] Based on the

20   fact that migrating an existing UNE-P account, for which the facilities have already been

21   assigned and can be reused, rarely requires APC involvement, the fallout rate should be

22   no greater than 0.10%.

---

[74] Verizon Response to Conversent-Vz 6-23. *See also* IPT, Exhibit III-A, Tabs 1, 3, 5, and 7, NMC line 4, column D
[75] IPT, Exhibit III-A, Project-initial- NMC, page 15 of 35.
[76] IPT, Exhibit III-A, Project-initial- APC, page 15 of 35.

1   RCMAC activities identified by Verizon are associated with functions necessary

2   to disconnect the UNE-P service, when cutting over to UNE-L. Since the CLEC has

3   already paid for these disconnection costs as part of the UNE-P migration and new

4   installation non-recurring charges when originally purchasing the UNE-P service, costs

5   included by Verizon as part of the RCMAC activities are double billed and, therefore,

6   should be eliminated.

7   Q.   **WHY ARE THE FREQUENCY OF OCCURRENCE ESTIMATES ASSUMED BY**
8   **VERIZON FOR THROWBACK ACTIVITIES OVERSTATED?**

9   A.   Throwback refers to those instances in which, after final hot cut due date activities have

10   been completed, the CLEC, because of trouble on the line, requests that Verizon reinstate

11   its UNE-P service until the CLEC can fix the trouble. Verizon assumes that the frequency

12   of occurrence for throwback is **PROPRIETARY INFORMATION BEGINS XXX**

13   **PROPRIETARY INFORMNATION ENDS**. (See Verizon's Project Hot Cut Study-

14   initial, NMC-connection step 7, RCCC-connection steps 10-12, RCMAC-connection step

15   5 and CO Frame-connection step 7).[77] It is AT&T's and Broadview's experience that

16   throwback is de minimis and occurs less than 1% of the times.

17   3.   **Verizon's Proposed Labor Times**

18 Q.   **HOW DID VERIZON DETERMINE ITS WORK TIMES FOR THE DIFFERENT**
19   **HOT CUT ACTIVITIES INCLUDED FOR ITS BASIC, PROJECT AND BATCH**
20   **PROCESSES?**

21 A.   NMC, CO Frame and RCCC work activity times were determined based on surveys that

22   Verizon developed and issued to various of its personnel employed in the work centers.

---

[77]   *Id.*, pages 15,16 and 17 of 35.

1   For the APC and RCMAC activities, Verizon re-used the same labor times that it used in

2   its Hot Cut Cost Study from D.T.E. 01-20.[78]

3   **Q. PLEASE EXPLAIN HOW A FORWARD LOOKING ADJUSTMENT FACTOR IS**
4   **USED BY VERIZON TO DETERMINE FORWARD LOOKING LABOR TIMES?**

5   A.   A forward looking adjustment factor (FLAF) represents the productivity improvement in

6   work times that Verizon expects to achieve primarily due to known system or process

7   improvements expected over a three-year planning period. Verizon multiplied its

8   baseline current work times, for the most part derived from its surveys, by its forward-

9   looking adjustment factor and frequency of occurrence to yield a forward-looking work

10   time. For example, assume that Verizon determined from its surveys that the current

11   work time to perform a work activity is 1 minute. Further assume that Verizon

12   determined that its frequency of occurrence is 50% and its FLAF is 50%, then only .25

13   minutes (1 minute x 50% frequency of occurrence x 50% FLAF) is used as the forward

14   looking work time.

15 **Q. HOW DID VERIZON DETERMINE ITS FORWARD-LOOKING ADJUSTMENT**
16 **FACTORS?**

17 A.   Verizon relied upon its subject matter experts within the functional organizations most

18   familiar with the various work activities under consideration to determine its FLAFs.

19   Verizon has provided no study, data or even reasoning that supports the development of

20   its FLAFs rendering them arbitrary and unreliable.

21 **Q. IS VERIZON'S USE OF FLAFS SUFFICIENT TO PRODUCE FORWARD-**
22 **LOOKING WORK TIMES?**

23 A.   No. As explained below, Verizon's current work times are overstated, in some cases

24   nonsensical and, for the most part, derived from flawed surveys. The application of

---

[78] IPT, page 50.

1		arbitrary FLAFs to unreliable work times does not yield reliable forward-looking work
2		times.
3	**Q.**	**PLEASE COMPARE VERIZON'S TIME ESTIMATES TO PERFORM WORK**
4		**ACTIVITY FUNCTIONS FOR ITS 2-WIRE BASIC, PROJECT AND BATCH**
5		**PROCESSES.**
6	A.	Attachment F to this testimony, entitled "Verizon-MA Hot Cut Cost Study, Comparison
7		of Verizon's Labor Times" compares Verizon's estimated labor times for its 2-Wire
8		Basic, Project and Batch processes.

9   There are several anomalies with Verizon's connection labor times that are

10   apparent from Attachment F:

11   <u>First</u>, it takes more time to pre-wire initial lines for the Basic process (**PROPRIETARY**

12   **INFORMATION BEGINS** XXXXXX **PROPRIETARY INFORMATION ENDS**)

13   than for the Project (**PROPRIETARY INFORMATION BEGINS** XXXXXXXX

14   **PROPRIETARY INFROMNATION ENDS)** and the Batch (**PROPRIETARY**

15   **INFORMTION BEGINS** XXXXXX **PROPRIETARY INFORMTION ENDS)**

16   processes. In addition, it takes less time to pre-wire additional lines for the Basic process

17   (**PROPRIETARY INFORMTION BEGINS** XXXXXXX **PROPRIETARY**

18   **INFORMTION ENDS**) than it does for the Project (**PROPRIETARY INFORMTION**

19   **BEGINS** XXXXXXXX **PROPRIETARY INFORMTION ENDS(** and Batch

20   (**PROPRIETARY INFORMTION BEGINS** XXXXXXX **PROPRIETARY**

21   **INFORMATION ENDS**) processes. (See Attachment F, CO Frame-step 3).

22   <u>Second</u>, it takes more time to perform the final wiring (lift and lay) for the initial

23   line on the hot cut due date for the Basic (**PROPRIETARY INFORMTION BEGINS**

24   XXXXXX **PROPRIETARY INFORMTION ENDS**) than for the Project

25   (**PROPRIETARY INFORMTION BEGINS** XXXXX **PROPRIETARY**

1 **INFORMATION ENDS)** and the Batch (**PROPRIETARY INFORMATION**

2 **BEGINS** XXXXX **PROPRIETARY INFORMTION ENDS,**) but less time to perform

3 the lift and lay for the additional lines for the Basic (**PROPRIETARY INFORMTION**

4 **BEGINS** XXXXX **PROPRIETARY INFORMTION ENDS**) than for the Project

5 (**PROPRIETARY INFORMTION BEGINS** XXXXXXX **PROPRIETARY**

6 **INFORMTION ENDS**) and for the Batch (**PROPRIETARY INFORMTION**

7 **BEGINS** XXXXX **PROPRIETARY INFORMATION ENDS)** processes. (See

8 Attachment F, CO Frame-step 4).

9 <u>Third</u>, it takes almost half as much time to pull disconnected wires on DD+1 for the Basic

10 (**PROPRIETARY INFORMATION BEGINS** XXXXX **PROPRIETARY**

11 **INFORMATION ENDS** for both initial and additional lines) than for the Project

12 (**PROPRIETARY INFORMATION BEGINS** XXXXXX **PROPRIETARY**

13 **INFORMATION ENDS** for both initial and additional lines) and Batch

14 (**PROPRIETARY INFORMATION BEGINS** XXXXXX **PROPRIETARY**

15 **INFORMATION ENDS** for both initial and additional lines) processes. (See

16 Attachment F, CO Frame-step 6).

17   There is no logical explanation for the variations in labor times for the same CO

18 Frame work activities performed as part of different processes.

19 **Q. WHAT DO YOU BELIEVE IS THE ROOT CAUSE OF THE TIME ESTIMATE**
20 **ANOMALIES DESCRIBED ABOVE?**

21 A. These time estimate anomalies are caused by the flawed survey methodology that

22 Verizon employed to derive these estimates. Verizon surveys suffer from problems

23 concerning survey design, execution and results that render the labor times produced

24 unreliable.

PUBLIC VERSION

1		These types of nonsensical results, and the criticisms raised by Dr Matthew
2		Mercurio in his Reply Testimony concerning Verizon's survey process, demonstrate that
3		Verizon's time estimates for these work centers should be rejected and modified to reflect
4		AT&T and Broadview's estimates. AT&T and Broadview's recommended adjustments
5		are presented in Attachment G to this testimony, entitled "AT&T and Broadview's
6		Recommended Adjustments to Verizon-MA Wholesale Non-Recurring Cost Model
7		Forward-Looking Work Activities, Times, and Costs."
8	**Q.**	**DO VERIZON'S CO FRAME ACTIVITIES REFLECT THE USE OF THE MOST**
9		**EFFICIENT TECHNOLOGIES AVAILABLE?**
10	A.	In its Panel Testimony in New York in Case 02-C-1425, Verizon claimed that it was
11		experimenting with hand-held devices to be used by technicians at the CO Frame for
12		status notification of hot cut activities, instead of the back and forth phone conversations
13		used today. [79] Verizon has not provided any indication if, and/or to what extent, the use
14		of such technology is included in its CO Frame FLAFs developed for Massachusetts.
15		Attachment G summarizes the adjustments that AT&T and Broadview recommend that
16		the Department make to Verizon's CO wiring, i.e., CO frame, labor times in order to
17		make them forward looking and efficient.

4. **Verizon's Proposed Labor Rates**

19	**Q.**	**ARE THE LABOR RATES THAT VERIZON USED IN ITS HOT CUT COST**
20		**STUDIES FORWARD LOOKING?**
21	A	No. We reviewed Mr. Robert Flappan's Reply Testimony and concur with him that
22		Verizon's labor rates are not compliant with TELRIC. In particular, Verizon's benefits
23		loadings are inconsistent with telecommunications industry specific benefit loading
24		information provided by the Bureau of Labor Statistics. This single departure from

1		TELRIC principles results in 75% of the difference between Verizon's embedded labor
2		rates and the adjusted labor rates developed by Mr. Flappan utilizing normalized TELRIC
3		principles.
4	**Q.**	**SHOULD THE LABOR RATES BE TRENDED FORWARD FOR INFLATION**
5		**AS VERIZON HAS DONE?**
6	A.	No. If trending is appropriate, both inflation and the full effects of productivity offsets
7		should be applied. Historical productivity trending has been recognized as a valid
8		approach to establishing rates in FCC price cap formulations and has generally resulted in
9		productivity offsets outpacing inflation increases. If Verizon had perfect foresight and
10		correctly applied a forward-looking efficiency factor, then perhaps it would be acceptable
11		to apply a forward-looking adjustment factor for inflation. However, since it did not
12		apply the full effects of productivity, we believe that inflation increases should be
13		removed from Verizon's labor rates.
14	**Q.**	**HOW DID YOU UTILIZE THE ADJUSTED LABOR RATES DEVELOPED BY**
15		**MR. FLAPPAN IN HIS REPLY TESTIMONY?**
16	A.	In Attachment G to our Testimony, we recalculated Verizon's hot cut costs utilizing the
17		adjusted labor rates developed by Mr. Flappan in his Reply Testimony.

<div align="center">

5.   **Verizon's Disconnection Costs**

</div>

19	**Q.**	**DID VERIZON INCLUDE DISCONNECTION COSTS IN ITS HOT CUT COST**
20		**ESTIMATES?**
21	A.	Yes, in each of its cost studies for the Basic, Project and Batch processes, Verizon
22		included disconnection costs, which it alleges are incurred when a CLEC terminates the
23		UNE-L service. In fact, the disconnection costs included in Verizon's Project hot cut
24		rates are **PROPRIETARY INFORMATION BEGINS** XXXXXXXX

---

[79] Case 02-C-1425, New York Verizon Initial Panel Testimony, dated October 24, 2003, page 21.

<div align="center">

PUBLIC VERSION

</div>

1		**PROPRIETARY INFORMATION ENDS** (initial and additional line respectively)[80]
2		and account for 26%/27% (initial and additional line respectively) of total Project hot cut
3		costs.

| 4 | Q. | **SHOULD DISCONECTION COSTS BE INCLUDED AS PART OF THE HOT** |
| 5 | | **CUT COSTS?** |

6   A.   No. AT&T and Broadview do not believe that disconnection costs should be included in

7   hot cut rates. As a general economic principle, disconnection costs, to the extent that

8   they are valid, should be paid at the time the CLEC causes Verizon to incur such costs,

9   i.e., upon termination of the UNE-L service. Including disconnection costs as part of the

10   upfront hot cut costs increases a CLEC's customer acquisition costs and, as explained

11   above, acts as a barrier to facilities-based local service entry. Bifurcation of the

12   connection and disconnection charges allows CLECs to pay for the connection costs at

13   the time it requests a hot cut and to pay for the disconnection costs at the time it

14   terminates UNE-L service. This will match costs to the proper time period and will lower

15   CLEC upfront acquisition costs in compliance with economic cost causation principles.

16   Moreover, the FCC's Wireline Carrier Bureau agreed with this approach, finding

17   that "disconnect costs, if any, should be recovered at the time of disconnection."[81] It

18   gave the following reasoning:

19   Collecting disconnection charges at the time of installation unnecessarily
20   raises entry costs in contravention of the Act's goals of promoting
21   competition. Moreover, the calculation of the disconnect cost is more
22   complicated and more prone to error when that cost is recovered at the
23   time of installation. Specifically, calculating the appropriate charge
24   requires an assumption as to how long the competitive LEC will retain a
25   customer, so that the future disconnection cost can be discounted to its
26   present value. In this case, Verizon assumed that the average customer

---

[80]   IPT, Exhibit III-A, Large Job (Project) Hot Cut Initial and Additional, Total Nonrecurring Disconnection Cost, page 17 of 35 and 20 of 35.
[81]   FCC Virginia Cost Arbitration Order, ¶ 596.

1		will stay with a competitive LEC for 2.5 years, but it provides no evidence
2		to support this figure.[82]
3	Q.	**HAS THE DEPARTMENT RULED ON THE INCLUSION OF**
4		**DISCONNECTION COSTS IN HOT CUT RATES IN A PRIOR PROCEEDING?**

5 A. Yes. In its D.T.E. 01-02 Order, the Department states: "The Department will 'maintain

6 our longstanding policy of including disconnection costs in the calculation of installation

7 NRCs.' Phase 4-L Order at 21."[83] In its Hot Cut Study, AT&T and Broadview did not

8 include disconnection costs. However, should the Department decide to maintain its

9 policy on non-recurring disconnection costs, we recommend the adoption of AT&T and

10 Broadview's restatement of Verizon's proposed disconnection costs to make them more

11 efficient and forward-looking. The restated disconnection costs are included in

12 Attachment G.

13 Q. **WHAT OTHER PROBLEMS EXIST WITH VERIZON'S DISCONNECTION**
14 **COSTS?**

15 A. For the most part, the labor times associated with the disconnection work steps identified

16 by Verizon are not valid and should be eliminated and/or substantially reduced.

17 Verizon shows service order, provisioning and CO wiring disconnect costs. It

18 should be noted that these disconnection costs purportedly represent the costs that

19 Verizon incurs to terminate an existing UNE-L arrangement. In other words, the UNE-L

20 disconnection occurs some period of time after the initial hot cut has been completed,

21 most likely because the CLEC lost the customer to either Verizon or another CLEC.

22 Consistent with the fallout rates for connection activities, NMC disconnection

23 activity fallout should be 1%. Verizon correctly shows 0% fallout for APC and RCCC

24 disconnect work activities. There should be no RCMAC work activity associated with

---

[82] *Id.*, ¶ 597.

1   UNE-L disconnection. This is true because a CLEC's unbundled loop is not connected to

2   the Verizon switch. Rather the CLEC's unbundled loop is connected to its own switch.

3   Therefore, at the time the CLEC's unbundled loop is disconnected, there is no Verizon

4   switch translation work for Verizon's RCMAC to perform.

5   Verizon shows four disconnection costs for its Project Hot Cut Study-initial, CO

6   Frame work center:

7   1) "Analyze Hot Cut Order" (step 1),

8   2) "Travel to Remote CO" (step 2),

9   3) "Complete Order" (step 5) and,

10   4) "Pull Disconnect Wire On DD+1" (step 6)[84].

11   Verizon has greatly exaggerated the work times for all these disconnection activities. For

12   example, Verizon has determined that it takes **PROPRIETARY INFORMATION**

13   **BEGINS** XXXXXXX[85] **PROPRIETARY INFORMATION ENDS** to pull the

14   disconnected CLEC jumper wire. Based on AT&T and Broadview's experience, it should

15   take no more than 1.0 minute to perform this simple task. All of AT&T's and

16   Broadview's recommended adjustments to Verizon's CO Frame disconnect times are

17   presented in Attachment G.

18   **Q.   DOES AT&T AND BROADVIEW HAVE A PROPOSAL TO ELIMINATE**
19   **DISCONNECTION CHARGES?**

20   A.   Yes. Since both Verizon and CLECs wish to impose disconnection charges on each

21   other, AT&T and Broadview would be amenable to an agreement whereby both parties

22   would mutually agree to waive such disconnection charges. If Verizon agrees to this

---

[83] D.T.E. 01-20, page 454.
[84] IPT, Exhibit III-A, page 16 of 35.
[85] *Id.*, CO Frame, step 6, page 16 of 35.

PUBLIC VERSION

| 1 | | proposal, AT&T and Broadview would be willing to discuss the terms of the agreement |
| 2 | | in parallel with the current proceeding. |

<p style="text-align:center">6. <u>Verizon's IDLC Surcharge</u></p>

4 **Q.** **PLEASE DESCRIBE VERIZON'S IDLC SURCHARGE STUDY.**

5 A. The structure and methodology used by Verizon for its IDLC Surcharge Cost Study is the

6 same as that used for its other hot cut cost studies, except for one important exception.

7 Verizon added a sixth work center entitled "Installation". According to Verizon,

8 installation activities represent those work steps associated with a dispatch to the field

9 necessary to transfer the customer's loop at the service access interface ("SAI") from

10 IDLC to either copper or UDLC facilities.

11 **Q.** **HOW IS THE IDLC SURCHARGE APPLIED?**

12 A. As explained earlier, a hot cut request for a loop on an IDLC facility is always treated as

13 a Basic hot cut. The IDLC Surcharge is added to the Basic Hot cut costs. Please refer to

14 Table 1 of this testimony for a complete listing of IDLC hot cut costs.

15 **Q.** **WHY IS VERIZON'S IDLC SURCHARGE STUDY FLAWED?**

16 A. Verizon's IDLC Surcharge Study violates a basic TELRIC costing principle because it

17 treats recurring charges as non-recurring charges. Therefore, Verizon's IDLC Surcharge

18 should be rejected.

19 **Q.** **WHAT CRITERIA SHOULD THE DEPARTMENT USE TO DISTINGUISH**
20 **THOSE HOT CUT COSTS THAT SHOULD BE RECOVERED THROUGH**
21 **RECURRING VS. NONRECURRING CHARGES.**

22 A. The criteria that should be used to distinguish recurring from nonrecurring costs is

23 whether the costs incurred to modify facilities are for the temporary, one-time use of the

24 requesting CLEC or are permanent modifications that render the facilities reusable by

25 subsequent carriers without additional costs.

<p style="text-align:center">PUBLIC VERSION</p>

1   If the modifications to the facilities are temporary and do not render them

2   reusable by subsequent CLECs, then the costs incurred are non-recurring and should be

3   recovered through one-time, upfront charges. If the facilities are made reusable by

4   subsequent CLECs at no extra cost, then the modification costs incurred should be

5   considered recurring and amortized over a period of time.

6   This distinction is important because it avoids penalizing the first CLEC who

7   requests permanent modifications to be made to facilities to the benefit of subsequent

8   CLECs who reuse them, but do not share in the modification costs. This inequity can

9   only be avoided if such permanent modification costs were recovered as recurring

10   charges and spread across the useful life of the facilities.

11   Q.   **DOES THE FCC AGREE WITH THIS CRITERION FOR DISTINGUISHING**
12   **BETWEEN RECURRING AND NON-RECURRING COSTS?**

13   A.   Yes. In the FCC Virginia Cost Arbitration order, the FCC's Wireline Carrier Bureau

14   adopted AT&T and WorldCom's test for determining whether a cost should be recovered

15   as a recurring or as a nonrecurring cost. It referred to it as the "reusability" test, and

16   articulated it as follows:

17   Under this "reusability test, if an activity need not be repeated in order to
18   serve a subsequent UNE customer, then it also benefits these potential
19   future customers and should be recovered through recurring charges.[86]

20   Q.   **PLEASE EXPLAIN WHY, UNDER THE FCC ACCEPTED TEST, THE IDLC**
21   **COSTS THAT VERIZON HAS ERRONEOUSLY IDENTIFIED AS**
22   **NONRECURRING SHOULD BE TREATED AS RECURRING COSTS?**

23   A.   The costs incurred to perform the necessary CO Frame wiring and to dispatch a

24   technician to the field to transfer the line from an IDLC to a copper or UDLC facility

25   renders the loop reusable by subsequent CLECs who wish to use the loop on an

---

[86]   FCC Virginia Cost Arbitration Order, ¶ 582.

1   unbundled basis, i.e., UNE-L. Therefore, the IDLC surcharge costs identified by Verizon

2   should be considered recurring in nature. If the IDLC surcharge costs are born by the

3   first CLEC that requests UNE-L service on an IDLC loop as an upfront, nonrecurring

4   charge, that CLEC will unfairly bear all such costs for all the subsequent CLECs that

5   provide service over that loop. This inequity can only be remedied if the costs are

6   considered recurring. In addition, it helps to reduce the onerous, upfront, nonrecurring

7   costs that Verizon wishes to impose on CLECs in the form of IDLC surcharges.

8 **Q.   HOW SHOULD THE DISPATCH CHARGES THAT VERIZON WISHES TO**
9 **IMPOSE AS PART OF THE IDLC SURCHARGE COSTS BE HANDLED?**

10   A.   The dispatch charges that Verizon wishes to impose as part of the total IDLC Surcharge,

11   are incurred to render the loop permanently usable by subsequent carriers that re-use the

12   loop as part of UNE-L service. As such, the dispatch costs should not be recovered in a

13   non-recurring cost study.

14 **Q.   HOW ARE THE COSTS OF FACILITIES REARRANGEMENT WORK AND**
15 **FIELD DISPATCH CHARGE IDENTIFIED IN THE IDLC SURCHARGE**
16 **NORMALLY ACCOUNTED FOR BY VERIZON?**

17   A.   Rearrangement of facilities such as the work activities identified by Verizon in its IDLC

18   Surcharge and Dispatch Charge should be accounted for as maintenance or "M" dollars.

19   For example, during Mr. Walsh's tenure with NYNEX working as an outside

20   plant engineer, he issued engineering work orders that directed technicians to rearrange

21   cross wires at the SAI in order to free up facilities for other purposes. The expenses

22   incurred were recorded in the "M" account. These are exactly the same activities

23   identified by Verizon in its IDLC Surcharge Study and, therefore, should also be

24   considered as part of the loop recurring maintenance expense.

| 1 | Q. | **HOW HAS THE DEPARTMENT RULED ON SUCH FACILITIES** |
| 2 | | **REARANGEMENT AND DISPATCH COSTS IN PRIOR PROCEEDINGS?** |

3 A. In its Decision in Docket 01-20, the Department found with respect to field installation

4 rearrangement and dispatch costs:

> Verizon's proposal to recover these [Field Installation Dispatch] costs in a
> nonrecurring manner unfairly penalizes the CLEC, which, by circumstances that it
> cannot control, happens to be the carrier that requests a UNE where field dispatch
> occurs.[87]

9 Q. **HOW DID THE FCC RULE ON THE ISSUE OF FIELD INSTALLATION**
10 **DISPATCH COSTS IN ITS RECENT VIRGINIA ARBITRATION DECISION?**

11 A. In the FCC Cost Arbitration Order, the FCC Wireline Carrier Bureau found that

12 Verizon's claim "that the costs of every activity undertaken pursuant to a competitive

13 LEC UNE order should be recovered through a NRC, including rearrangements in the

14 central office or field dispatches for rearrangements at the FDI"[88] to be unfounded.

15 **V.** **CONCLUSION**

16 Q. **PLEASE SUMMARIZE YOUR TESTIMONY.**

17 A. Verizon's proposed hot cut processes do not include any of the automation or other

18 recommendations that CLECs have stated that they need. To the contrary, Verizon

19 proposed a new "Batch" process that is even less suitable to CLEC needs. AT&T and

20 Broadview have described the substantial and fatal operational flaws inherent in

21 Verizon's proposed Batch hot cut process. The Batch process prohibits changes to

22 customer accounts during the pre-hot cut holding period, eliminates the CLEC's ability to

23 choose the time the hot cut is performed to accommodate customer preference, and does

24 not allow CLECs to monitor the quality of the hot cut. In addition, there is no certainty

---

[87] D.T.E. 01-20, page 422.
[88] FCC Virginia Cost Arbitration Order, ¶¶ 586-588.

1	over the future price of the rolling UNE-P option necessary to Batch cut new customers
2	and the process is limited in scope because it cannot be used for IDLC or CLEC-to-
3	CLEC hot cuts. As such, Verizon's proposed Batch hot cut process is unsuitable for use
4	by AT&T and Broadview or any other CLEC that wishes to ensure customer service
5	quality. Therefore, contrary to Verizon's claim, the Batch process does not satisfy its
6	obligations under the TRO to develop an efficient, seamless and low cost hot cut process
7	to serve the mass market.
8	In addition, having costed out a backward looking manual process with little
9	forward looking automation, Verizon's cost studies produce hot cut rates that are not
10	TELRIC-compliant. They are egregiously high and would cost CLECs approximately
11	$99 to $123 million during the 27-month period to convert their embedded base of
12	customers and, thereafter, $37 to $46 million annually on a going-forward basis. No
13	CLEC could ever hope to recover these costs from its customers and be competitive with
14	Verizon. Verizon's proposed rates, if adopted by the Department, would preclude
15	facilities-based competition. If Verizon had, instead, costed out a forward-looking
16	process, its cost studies would have produced a rate in the neighborhood of $5.00 per line
17	for individual hot cuts (and less for bulk), comparable to the rate that the approved cost
18	model in the FCC Cost Arbitration Order produces.
19	No economically rational firm not motivated by anti-competitive interests would
20	pursue an approach that promises no improvements to a process known to be inherently
21	dissatisfactory at a price tag of well over $400 million, over the first ten years of
22	performing hot cuts. Given the massive amounts of resources required to achieve a result
23	that will produce a market that is less competitive than the market today, the only

1   economically rational approach is to use those resources to implement an electronic loop

2   provisioning technology that will eliminate the wasteful activities and their required

3   resources necessary in Verizon's proposal to move customers between carriers in a

4   competitive market. Instead of putting Verizon's competitors out of business, the

5   expenditure of more than a $400 million should be used to develop a process that is

6   reliable, cost-efficient and, perhaps most importantly, transparent to customers who

7   "have come to expect the ability to move freely from carrier to carrier in a seamless and

8   rapid manner,"[89] similar to consumers' changes of long distance carriers with an

9   automated PIC change or to the "electronic transfer" effected when a CLEC customer is

10   provisioned onto UNE-P.

11   While it is important that the Department continue its work to improve Verizon's

12   manual "hot-cut" processes, it should not base its efforts on the assumption that any

13   manually intensive hot cut process, "batch" or otherwise, will have a meaningful impact

14   on provisioning UNE-Loops at commercial volumes in the mass-market.

15   In the meantime, the Department should reject Verizon's proposed cost model and

16   proposed rates and instead adopt AT&T's and Broadview's cost study and proposed

17   rates. In addition, the Department should require Verizon to implement the

18   enhancements to Verizon's Project hot cut process that we have recommended in our

19   testimony. Although this will not produce a TRO-compliant bulk hot cut process, it will

20   produce a more efficient and reliable process that will result in more efficient migrations

21   between carriers, lower costs, and less disruption of service to customers.

22 **Q.   THANK YOU. I HAVE NO FURTHER QUESTIONS FOR THESE WITNESSES**
23 **   AT THIS TIME.**

---

[89]   *TRO*, ¶ 474.